University of Alberta

The Relationship Between Patient Satisfaction and Psychosocial Adjustment in a Forensic Psychiatric Outpatient Population

by

Robert Donald Reddick ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Nursing

Faculty of Nursing

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Abstract

Patient satisfaction is the extent to which patients react to, or have their needs, wants, or expectations met by services provided. The value of satisfaction data lies in its significance in fiscal deliberations, continuous quality improvement, and the mediation of patient care outcomes. To the end of program improvement, the purpose of this study was to determine the level of, and relationship between, patient satisfaction and psychosocial adjustment across five treatment programs in a heretofore unreported forensic psychiatric outpatient population. A cross-sectional, comparative, and correlational field survey design was used. The Service Satisfaction Scale - 30 was used to collect satisfaction and demographic data, and the Holden Psychological Screening Inventory was used to collect symptomatology and psychosocial adjustment data. Results indicated that satisfaction was, in a general sense, "mixed" to "mostly satisfied" and that the level of satisfaction did not differ significantly across treatment programs. A significant, negative and modest relationship was found between symptomatology and satisfaction. Replication of this study with improved sampling, refined qualitative measurement, access to study "refusers" and treatment non-completers, and increased use of complementary data sources, is recommended.

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CHAPTER I

INTRODUCTION

Prior to the 1970's, the patient's viewpoint in program evaluation was largely unsolicited (Larsen, Attkisson, Hargreaves, & Nguyen,1979). Although patients may have been evaluated by others, or perhaps evaluated their own functioning, they did not directly evaluate the programs that provided them with services. The impetus to more directly involve patients has been attributed to a number of factors including increased application of marketing principles to the ends of cost containment and quality improvement (Dansky & Brannon, 1996; Glass, 1995; Lebow, 1982; Marshall, Hays, & Mazel, 1996), a rise in consumerism (Calnan, 1988; Lebow, 1982; Margolis, Sorenson, & Galano, 1977; Marshall et al., 1996; Williams & Wilkinson, 1995), new legislative mandates to include service users in evaluation (Larsen et al., 1979; Lewis, 1994), and increasing acceptance of the idea that patient views of program quality are relevant (Holcomb, Adams, Ponder, & Reitz, 1989; Margolis et al., 1977; Ross, Steward, & Sinacore, 1995; Williams & Wilkinson, 1995). It has more recently been suggested that initiatives are shifting (based on pressures like fiscal accountability to third party payers, including the government, and an increasing focus of accreditation organizations on the quantitative demonstration of continuous quality improvement) from the structure and process of care, to the outcomes of care (Sederer, Dickey, & Hermann, 1996). Outcomes of care, the results of the interaction between structure (organizational design) and process (services rendered), include well being, functioning, symptoms, treatment utilization, and satisfaction (Sederer et al., 1996).

While the assessment of patient satisfaction has been considered important, there has been considerable debate regarding value of the data obtained. On the one hand there have been concerns related to instrumentation, measurement, and validity (Gutek, 1978; Keppler-Seid, Windle, & Woy, 1980; Pascoe, 1983; Ruggeri, 1994), the consumers ability to adequately judge treatment (Scheirer, 1978), possibly due to his or her mental condition (Brandon, 1981: as cited in Ruggeri, 1994), and whether or not treatment efficacy should be the primary consideration (Scheirer, 1978). On the other hand it has been countered that the measurement problems are correctable (Lebow, 1982) and that the client has a valid view of treatment and service quality (Donabedian, 1988; El-Guebaly, Toews, Leckie, & Harper, 1983; Holcomb et al., 1989; Kazdin & Wilson, 1978; Lebow, 1983; Ross et al., 1993, 1995). In terms of service quality, there seems to be a growing conviction that consumers are becoming more capable as well as more sophisticated in evaluating their health care (Cleary & McNeil, 1988; Vuori, 1987). More specifically, it has been argued that patient satisfaction evaluations facilitate identification of client needs and service deficiencies (Dansky & Brannon, 1996; Dyck & Azim, 1983; Williams & Wilkinson, 1995), reveal system performance and permit comparisons of care delivery methods (Lewis, 1994), and furnish direction related to quality improvement, risk management or cost containment initiatives (Biderman, Carmel, & Yeheskel, 1994; Dansky & Brannon, 1996; Donabedian,1988; Glass,1995; Gustafson, 1991; Lehr & Strosberg, 1991; Nelson & Niederberger,1990). With respect to the impetus to focus on outcomes, it has been offered that the value of patient satisfaction as an outcome measure lies in its utility in facilitating improvement in patient compliance,

patient or family need satisfaction, program design, service delivery, and in some instances, clinical outcomes (Sederer et al., 1996).

Overall, the value of patient satisfaction information appears to be that as an independent variable it mediates outcomes, thus helping to identify salient treatment factors (patients behave differently if they are or are not satisfied with treatment components), and that as a dependent variable it may be used for continuous quality improvement (satisfaction is a response to particular aspects of service delivery structure and process) (Greenfield & Attkisson, 1989).

Satisfaction in this study was operationally defined as the extent to which patients react to, or have their needs, wants, or expectations met by, services provided (Attkisson & Greenfield, 1994; Lebow, 1983; Pascoe, 1983; Ruggeri, 1994). It was also considered to be a multidimensional construct, in that patients are thought capable of discriminating between different service facets. It was in these regards that the Service Satisfaction Scale-30 (SSS - 30), developed by Thomas Greenfield and Clifford Attkisson (1989), was selected as the measure of satisfaction. The SSS - 30 was stated to be a multidimensional measure of satisfaction with a variety of service parameters, and has been previously used in mental health settings (Greenfield & Attkisson, 1989).

A number of authors (Carscaddon, George & Wells, 1990; Deane, 1993; Gaston & Sabourin, 1992; Greenfield, 1983; Greenfield & Attkisson, 1989; Marshall et al.,1996; Ogles, Lambert & Masters, 1996; Ruggeri, 1994; Sederer, Dickey & Hermann, 1996) have pointed to the need to link satisfaction data with symptomatology, diagnoses, and other measures of functioning or adjustment. Psychosocial adjustment refers, in part, to an individual's psychological and social adaptation to his or her environment (Braun &

Linder, 1979). Successful adjustment allows continued functioning in society, performance of tasks, maintenance of family and social relationships, and subjective feelings of comfort and contentment. On the other hand, unsuccessful adjustment may be accompanied by stress and physical, social, or psychological dysfunction. It was in the context of endeavoring to relate adjustment and symptomatology to satisfaction that the Holden Psychological Screening Inventory (HPSI) (Holden, 1996) was selected for use this study. The HPSI is a brief measure of the major domains of psychopathology (psychiatric, depression, and social symptomatology) and the total score is considered a measure of overall psychological (Holden, 1996) or psychosocial adjustment (Reddon, Pope, Dorais & Pullen, 1996; Reddon, Pope, Friel & Sinha, 1996).

This study was undertaken with a view to identifying aspects of the forensic psychiatric outpatient clinic service structure and process with which patients were satisfied or dissatisfied. The primary goal was to multidimensionally assess satisfaction (as a dependent variable) for the purpose of continuous quality improvement. Secondarily, given the presumed significance of symptomatology and adjustment to satisfaction, that relationship was also explored. The forensic psychiatric outpatient clinic treatment population had not been previously assessed in these regards.

Study Objectives

The overall objective of this study was to determine the level of satisfaction, and the relationship between patient satisfaction and psychosocial adjustment, across 5 treatment programs (violent, sexual, mentally ill and other adult offender, and young offender) in a forensic psychiatric outpatient population. The following research questions were posed:

1. What is the level of patient satisfaction with services across treatment programs and overall?
2. With what, specifically, are patients satisfied and dissatisfied ?
3. What is the level of psychosocial adjustment across treatment programs and overall?
4. What is the nature of the relationship between satisfaction and psychosocial adjustment?

CHAPTER II

LITERATURE REVIEW

It has been stated that the concept of patient satisfaction is poorly defined and seldom clarified in the minds of both researchers and respondents (Locker & Dunt, 1978; Pascoe, 1983; Ruggeri, 1994; Ware, Snyder, Wright, & Davies, 1983), and that early work was driven more by practical considerations than by theory (Attkisson & Greenfield, 1994). In a seminal attempt at theoretical explication, Linder-Pelz (1982) suggested that patient satisfaction is a positive affective or evaluative response engendered by comparison of one's care experience to values and expectations. Ruggeri (1994), in a review of 68 empirical studies from 1982 to 1994, and Lebow (1982) in an earlier review, suggest that this expectancy model has been implicitly or explicitly used in most research. However, it has been argued that expectations play a limited role in patient satisfaction and that satisfaction may be related to a number of other psychosocial factors including relief, fear of wasting the therapist's time, confidence in the therapist, ignorance of the system, feeling uncomfortable in commenting negatively or reluctance to criticize a system one is dependent on, and self-blame (Avis, Bond, & Arthur, 1997). It also been posited that patient satisfaction may be due more to present experiences rather than to a constellation of previously held values and past experiences (Lebow, 1982). In practice, patient satisfaction seems generally defined as the extent to which patients have their needs, wants, or expectations met (Lebow, 1983) or as patient's responses to the context, process, or outcomes of their service experience (Pascoe, 1983).

Significantly more attention has been directed to the domain or dimensionality of patient satisfaction, with attendant implications for theory and definition. Dimensionality

refers to whether respondents distinguish between aspects of the service delivery process and its content, and whereas multidimensionality relates to satisfaction with discrete aspects of the care experience, unidimensionality refers to overall or global satisfaction (Lebow, 1983). It has been proffered that a multidimensional concept of satisfaction is indispensable to service change and improvement (Lewis, 1994) in that a unidimensional construct would preclude the identification of discrete service aspects with which patients are satisfied or not. In a review of theoretical and empirical articles published prior to 1976, eight distinguishable dimensions were identified (Ware, Davies-Avery, & Stewart, 1978), and these were subsequently reduced to five: quality of care, accessibility/convenience, finances, physical environment, and availability (Ware, 1981). The findings of other investigators have included: a single global satisfaction factor (Larsen et al., 1979); one factor, interpersonal relations with staff (Elbeck & Fectau, 1990); two factors, general satisfaction with treatment/staff and access (Distefano, Pryer, & Baker, 1983); three factors, interpersonal care, technical quality, and access to care (Ross et al., 1993); two major factors, practitioner manner/skill and perceived outcome, and two minor factors, procedures and accessibility (Greenfield & Attkisson,1989); five first order factors, success, harmlessness, accessibility, respect, and partnership (Tanner & Stacy, 1985); seven factors, satisfaction with overall care, staff responsiveness, staff behavior, center accountability, meeting needs, medicines, and access (Love, Caid, & Davis, 1979); and seven factors, overall satisfaction, professional skills and behaviors, information, access, efficacy, types of intervention, and relatives involvement (Ruggeri, 1994).

Pascoe (1983) concluded that the evidence from different approaches, though not totally consistent, suggests that separate dimensions of health care at both the macro (global satisfaction with care) and micro (satisfaction with discrete aspects of care) domains determine consumer satisfaction. He suggested there may be as many as six dimensions at the macro level which may be reduced to two, provider conduct-general satisfaction and accessibility-availability, and that at the micro level there may be as many as four dimensions of relevant provider behavior. On the other hand Lebow (1982) stated that in some of the studies where multidimensionality was found, large initial factors account for much of the total variance. Overall, and although multidimensional measures appear to have gained ascendancy, there exists a degree of uncertainty as to which dimensions constitute the domain of satisfaction. This uncertainty seems related primarily to the use of nonstandardized instruments measuring different aspects of satisfaction in poorly sampled and diverse populations (Hall & Dornan, 1988; Ruggeri, 1994).

Measurement

It appears that the only instrument used in more than a few studies is the Client Satisfaction Questionnaire - 8 (CSQ-8) developed by Larsen et al. in 1979 (Lebow, 1983; Ruggeri, 1994). Other recommended but infrequently used scales for outpatient mental health treatment evaluation include the Evaluation Ranking Scale (Pascoe & Attkisson, 1983), the user satisfaction survey (Love et al., 1979), the satisfaction with mental health treatment scale (Slater, Linn, & Harris, 1982), the quality assurance patient evaluation scale (Deiker, Osborn, Distefano, & Pryer, 1981), and the SHARP multidimensional client satisfaction instrument (Tanner,1982). Based on experience with the CSQ-8,

Greenfield and Attkisson (1989) have developed the Service Satisfaction Scale - 30 (SSS-30) to assess satisfaction multidimensionally. Ruggeri (1994), however, believes the SSS-30 may not assess some domains of specific importance in a variety of mental health settings and, in this regard, recommends the Verona Service Satisfaction Scale (VSSS). The VSSS was collaboratively developed by Greenfield and Ruggeri, specifically for an Italian population, on the basis of refinements of the SSS-30 (Attkisson & Greenfield, 1994).

In addition to formal measures, a variety of "acceptability" measures (simple, inexpensive, and straightforward) applicable across the broad range of mental health services have also been advocated (Lebow, 1987; Lebow & Newman, 1987). These include consumers reports of satisfaction, records of complaints, length of treatment, determining proportions of patients who fail to attend after initial contact (engagement data), and identifying barriers to accessibility (distance, cost). Lebow adds that patient surveys should always be used in conjunction with other indices, in part to balance potential reactivity effects. Similarly, Lewis (1994) recommends adjunct utilization of suggestion boxes, focus group discussions, diary keeping, telephone help lines, surveys, and interviews as complementary data sources.

Reliability

Reliability is defined as the consistency or stability of measures. (Christensen, 1997). The early literature suggests that the reliability of satisfaction reports has only been assessed in a few studies and that most satisfaction scales have not been assessed for reliability (Lebow, 1983; Ware, Davies-Avery & Stewart, 1983). Recent studies have been more vigilant in this regard, and good reliability and stability has been reported for

the SSS-30 (Greenfield & Attkisson, 1989) and the VSSS (Ruggeri & Dall'Agnola, 1993).

Validity

Validity is the extent to which a variable actually measures the construct one intends to measure (Christensen, 1997). Threats to validity are those variables or factors which compromise the integrity of a variable as a measure of a particular construct and, with respect to the satisfaction construct, an abundance of these threats have been identified. A number of authors have suggested that sampling bias, related to low and differential responding, is a significant concern (Deane, 1993; El-Guebaly et al., 1983; Lebow, 1982; Pascoe, 1983; Svensson & Hansson, 1994). Lebow has further pointed to the threats posed by lack of vigilance in data collection, lack of procedural control, method variance, primitive data analysis, lack of criterion-related measures, and a failure to determine baselines. Similarly, with respect to method and instrumentation, issue has been taken regarding response items being based on provider assumptions (Avis, Bond & Arthur, 1997; Elbeck & Fectau, 1990; Locker & Dunt, 1978; Williams, 1994), the inclusion of non-satisfaction items in instruments (Lebow, 1982), lack of terminological clarity (Avis et al., 1997; Lebow, 1982), lack of instrument sensitivity to dimensions that impact evaluation (Pascoe, 1983), and the use of dichotomous or trichotomous response options which ordinally rank respondents, although satisfaction is assumed to be a continuous variable (Davies & Ware, 1981; Locker & Dunt, 1978). As well, a number of authors have cautioned against the use of reductionistic quantitative surveys which preclude access to significant qualitative satisfaction information (Avis et al., 1997; Calnan, 1988; Locker & Dunt, 1978; Ross et al., 1993; Williams, 1994; Williams &

Wilkinsen, 1995). Other authors have opined that various sociopsychological artifacts merit significant consideration. Potential satisfaction artifacts identified in the literature include acquiescence (Deane, 1993; Elbeck & Fectau, 1990; El- Guebaly et al., 1983; Lebow, 1982; Svensson & Hansson, 1994; Ross, Steward & Sinacore, 1993; Ware, 1978), social desirability response bias (Avis, Bond & Arthur, 1997; Deane, 1993; Gaston & Sabourin, 1992; Levois, Nguyen & Attkisson, 1981), the existence of an elevator variable (distinct from social desirability) which reflects a tendency to suspend critical judgment (Tanner & Stacy, 1985), reactivity effects (Deane, 1993), assessment situation vagaries (Pascoe, 1983), and the Hawthorne effect and experimenter bias (Levois et al., 1981). It has also been suggested that the relationship of satisfaction to life circumstances, diagnostic variables, and psychiatric symptoms (Levois et al., 1981; Weinstein, 1979) must be investigated. Ruggeri (1994), in a summative review of studies published from 1982-1993, stated that the limitations of empirical studies typically related to inadequacy of the study design or implementation, inconsistent instrument construction, and a dearth of attention to the psychometric properties of the instruments.

Research Findings

Research findings are reviewed in terms of satisfaction, sociodemographic, diagnostic, treatment, and service considerations.

Satisfaction

A number of authors report that patient satisfaction scores are high and often undifferentiated (Deane, 1993; Dyck & Azim, 1983; Larsen et al., 1979; Margolis et al., 1977; Pascoe, 1983; Ruggeri & Dall'Agnola, 1993). Lebow (1983), in a review of 34 studies from 1964 to 1982, found that 78.3% of patients expressed satisfaction with

outpatient mental health treatment. He cautions, however, that when the number and range of respondent choices per item is extended beyond satisfaction and dissatisfaction, an average of only 49% of clients classify themselves as highly satisfied. As such, Lebow suggests that these data are incompatible with the notion that consumer surveys result in undifferentiated responses of satisfaction, and that the level of satisfaction appears only slightly higher than the norms for success in outcome research in psychotherapy and psychopharmacology. Others like Ruggeri (1994), in his review of the literature, have suggested that negatively skewed distributions may result, in large part, from the measurement problems previously discussed. A number of authors (Avis et al., 1997; Perrault, Leichner, Sabourin, & Gendreau, 1993; Polowczyk, Brutus, Vidal, & Cipriani, 1993; Ross et al., 1993), however, have suggested that the typical high levels of satisfaction may be due to inordinate reliance on quantitative surveys constructed from the perspective of the provider. They concluded that dissatisfaction may be more freely expressed in a qualitative context using, for example, open-ended questions oriented toward dissatisfaction, and patient rather than staff surveyors.

Sociodemographics

Ware et al. (1978), in a review of 13 publications, concluded that except for the categories of marital status, race and social class, trends exist regarding sociodemographic characteristics and satisfaction. However, this is not supported by Fox and Storms (1981) who characterized the trends as inconsistent. According to Pascoe (1983) the sociodemographic categories that have demonstrated the most consistent relationships with service satisfaction are age and gender, although the amount of variance accounted for by these variables is small. Lebow (1983), in his review of the

literature, found that increased service satisfaction is significantly associated with being older and female, and that moderately suggestive relationships have been found with respect to demographic variables.

Diagnosis

A number of studies have found satisfaction to be related to diagnosis with satisfaction being lower in psychotic and drug abusing clients than depressed clients in a crisis intervention clinic (Getz, Fujita, & Allen, 1975: cited in Lebow, 1983), in antisocial and psychosomatic clients than those with 'emotional distress' or alcoholism at a community health center (Ciarlo, 1975: cited in Lebow, 1983), in drug abusers than other outpatients (Distefano, Pryer, & Garrison, 1981), in suicidal than non-suicidal users of emergency services (Richman & Charles, 1976: cited in Lebow, 1983), in more disturbed than less disturbed clients in a day hospital (LeVois et al., 1981) and outpatient care (Attkisson & Zwick, 1982), and in those with poor prognoses in outpatient family therapy (Woodward, Santa-Barbara, Levin, & Epstein, 1978: cited in Lebow, 1983). These findings appear supported by recent studies which have found satisfaction negatively correlated with symptom severity (Carscaddon et al., 1990; Deane, 1993; Gaston & Sabourin, 1992) and mental health status (Marshall et al., 1996).

Treatment

In terms of treatment, satisfaction has been found to be lower in those with a greater number of hospitalizations and less time since last hospitalization in outpatient treatment (Slater et al., 1982), lower in involuntary rather than voluntary hospitalized patients (Spensley, Edwards & White, 1980: cited in Lebow, 1983), lower with hospital rather than after care (Bene-Kociemba, Cotton, & Fortgang, 1982; Wright, Heiman,

Shupe, & Olvera, 1989), lower with group therapy rather than individual therapy (Dyck & Azim, 1983) and higher in group therapy if modifications are made according to criticisms (Azim & Joyce, 1986), and higher in those who perceived a greater psychotherapeutic alliance (Gaston & Sabourin, 1992). Deane (1993), however, more recently found no difference between clients receiving individual, group, or psychotropic medication therapies.

Service

Patients tend to report highest satisfaction with health care providers, and lower satisfaction with accessibility, availability, convenience, and cost (Pascoe, 1983; Slater et al., 1982). Technical competence, interpersonal skills, therapeutic alliance, continuity of care, patient-provider fit, simple approaches aimed directly at problem solving, and client global report of outcome are positively related to patient satisfaction (Lebow, 1983; Pascoe, 1983). Ruggeri & Dall'Agnola (1993) report higher patient and relative satisfaction in the dimensions of overall satisfaction, professional skills and behavior, access, and efficacy; and lower satisfaction in the dimensions of information, types of intervention, and relative's involvement.

In terms of the relationship between satisfaction and premature (non-mutually agreed) termination, Lebow (1983) contends that although the majority of dropouts express satisfaction, the rates are not as high as for those continuing beyond the first few sessions of treatment. He adds that although subsequent inquiries into the reasons for termination show somewhat higher rates of explicit and implicit criticism, even the most critical samples note extra-treatment reasons.

Summary

There is consensus that patient satisfaction assessment can contribute information useful for the improvement of patient care and service delivery. The concept itself, however, has not been clearly articulated theoretically or conceptually. Although factor analysis studies offer support for its multidimensional nature, conflicting results have been obtained at both the macro (global or overall satisfaction) and micro (satisfaction with discrete aspects of service) levels. This is significant in that a unidimensional construct would preclude identification, and subsequent enhancement, of discrete service activities with which patients are dissatisfied. Although significant relationships have been found between levels of reported satisfaction and a variety of patient and service related variables, the studies have typically been compromised by methodological, measurement, and analytical shortcomings. As well, a number of authors (Avis et al., 1997; Perrault et al., 1993; Polowczyk et al., 1993; Ross et al., 1993) have concluded that existent dissatisfaction may be more freely expressed in a qualitative context.

Research directions

It seems imperative that research be conducted with these considerations in mind. For example, there is agreement that the dimensions of satisfaction need to be further investigated (Distefano et al., 1983; Greenfield & Attkisson, 1989; Lebow, 1982; Pascoe, 1983) and that this should be accomplished through patient, relative and professional input (Lebow, 1983; Ruggeri, 1994). There is also a need for the development of standardized instruments to facilitate validity and cross-setting comparability (Greenfield & Attkisson, 1989; Holcomb et al., 1989; Lebow, 1983; Pascoe, 1983; Ruggeri, 1994; Svensson & Hansson, 1994). Lebow (1983) also suggests methodological innovations

including the use of time series (satisfaction over treatment) and multitrait-multimethod (to assess the relationships between aspects of satisfaction and between satisfaction and other treatment outcomes) designs. More theoretical based research relating to the development of norms for different types of services, scale reliabilities and covarying conditions, the relationship of satisfaction to specific treatment, diagnostic, history, patient and outcome variables, and multiple measures of service performance, is strongly recommended (Greenfield, 1983; Greenfield & Attkisson, 1989; Pascoe, 1983; Lebow, 1983; Ruggeri, 1994). There is agreement that patient satisfaction information is not a substitute for other indicators of outcome (Greenfield, 1983) and that complementary sources such as psychopathology change scores, symptom level and change, quality of life, and other areas of functioning should be incorporated (Ogles, Lambert, & Masters, 1996). This is supported by a number of recent studies which have found satisfaction to be negatively correlated with symptom severity (Carscaddon et al., 1990; Deane, 1993; Gaston & Sabourin, 1992) and mental health status (Marshall et al., 1996). In this regard it has been suggested that to provide a meaningful context for outcomes data, additional patient information, such as demographic characteristics, well being, functioning, symptoms, and treatment type and utilization, must be linked with patient satisfaction data (Sederer et al., 1996). This is not inconsistent with the recommendations that simple or 'acceptability' measures (simple, inexpensive, and straightforward) are relevant and applicable across the broad range of mental health services (Lebow, 1987; Lebow & Newman, 1987; Lewis, 1994). There has, as well, been little systematic study of satisfaction levels obtained while respondents are still receiving services, and this is recommended as an area for further study (Attkisson & Greenfield, 1994). Conclusions

that existent dissatisfaction may be more freely expressed in a qualitative context suggest that, at minimum, qualitative questions should be attached to quantitative surveys (Avis et al., 1997; Perrault et al., 1993; Polowczyk et al., 1993; Ross et al., 1993).

It was with consideration of the findings of this literature review that the present study was designed. An attempt was made, specifically, to address the salient measurement, methodological, and other issues outlined above so that meaningful and comparable program evaluation data was collected.

CHAPTER III

METHODS

This study was designed as a cross-sectional, comparative and correlational, field survey, and the following research questions were posed:

1. What is the level of patient satisfaction with services across treatment programs and overall?
2. With what, specifically, are patients satisfied and dissatisfied ?
3. What is the level of psychosocial adjustment across treatment programs and overall?
4. What is the nature of the relationship between satisfaction and psychosocial adjustment?

The setting for this study is Forensic Assessment and Community Services (F.A.C.S.), a community-based program of the Alberta Hospital, Edmonton (A.H.E.) site of the Alberta Provincial Mental Health Advisory Board. F.A.C.S. is located in downtown Edmonton, Alberta, Canada, in close proximity to the inner city core, the Edmonton Remand Centre, and the Law Courts Building. A broad range of clinic- or outreach-based assessment, treatment, education, and consultation services are provided to forensic patients, Alberta Justice, the Correctional Service of Canada (Prairie Region), and allied health professionals. These services are delivered within a catchment area stretching northward from Red Deer, Alberta, bounded by the borders of the provinces of Saskatchewan and British Columbia, up to and including the Northwest Territories. Services are provided for adults and adolescents who have been detained or convicted under the Criminal Code of Canada. Priority for treatment services is granted to those on

probation or parole, those with court-ordered treatment conditions, violent, sexual, mentally ill and young offenders, and those for whom services are not available elsewhere.

Over 1500 patients were registered at the clinic at the time of the study and of these approximately 1000 were attending treatment programs. For the most part, those not attending for treatment were either still being assessed or were being seen for consultation at area jails. Over 70% of individuals attending treatment programs had been referred by probation officers and attending treatment was a court-ordered condition of their probation.

Patients accepted for treatment are assigned to one of five treatment programs for individual, couples, family, or group therapy. The treatment programs include those for violent, sexual, mentally ill, and 'other' adult offenders, and young offenders. A variety of therapeutic groups are offered within each treatment program. Assignment to a treatment program is dependent on the type of offense committed and the treatment team assessment of the primary problem.

Sample

The accessible population for this study was adult and young offenders who, voluntarily or as a condition of probation, were attending treatment programs at the forensic psychiatric outpatient clinic site. Approximate accessible population sizes on the day of the initiation of the study were 200 adult violent offender, 100 adult sexual offender, 400 adult mentally ill offender, 150 adult other offender, and 150 young offender, treatment program participants. Of these, patients who did not speak, write and understand English, those who were attending for assessment, and those seen for

psychiatric consults at area jails, were excluded. Of the approximately 1000 patients receiving treatment, a total of 417 (41.7%) were eventually approached and asked to participate in the study. An attempt was made to approach all patients with scheduled appointments who attended during the time of the study, from November 3, 1997 to December 11, 1997. Patients who missed appointments, or did not have a scheduled appointment, during this 6-week window were excluded. Of the 417 approached, 323 (77.5%) agreed to participate and 94 (22.5%) declined. Of the 323 who agreed to participate, 265 (63.5% of 417) satisfactorily completed both study instruments. The criteria for acceptable instrument completion was that not more than two items per scale were missing. Within this context, 265 respondents were included in the study, 58 were excluded, and 94 of those approached declined to participate.

To discern medium effect sizes when comparing satisfaction and determining the relationship between satisfaction and psychosocial adjustment across treatment programs, a minimum research sample size of 39 individuals per treatment program was sought (Cohen, 1992). In this regard it was thought that effect sizes must be at least medium, or possibly large, to be meaningful in terms of clinical or service adjustments (Fletcher, Fletcher, & Wagner, 1996). The required sample size for detecting large effect sizes (which would be acceptable) is 30 (Cohen, 1992).

Instruments

Patient satisfaction and sociodemographic data was collected through administration of the Service Satisfaction Scale - 30 (SSS-30; Greenfield & Attkisson, 1989) and psychosocial adjustment data was collected using the Holden Psychological Screening Inventory (HPSI; Holden, 1996). The administration of both instruments was

conducted under the supervision of a Research Scientist fully qualified to administer psychological tests.

Service Satisfaction Scale-30

The Service Satisfaction Scale-30 (SSS-30) was developed by Greenfield and Attkisson (1989) as a multidimensional measure of patient satisfaction, on the basis of the widely-used, and unidimensional, Client Satisfaction Questionnaire-8 (Larsen et al., 1979). The impetus was to address problems related to typically high levels of service satisfaction (negatively skewed distributions), difficulty distinguishing degrees of satisfaction (lack of sensitivity), difficulty discriminating between particular service facets (due to lack of specificity of items), and a lack of theoretical grounding of the satisfaction construct (Attkisson & Greenfield, 1994). It was chosen for this study as it appears to be the most sensitive, discriminating, reliable, and valid instrument currently available for the purpose of assessing patient satisfaction.

The SSS-30 consists of a 30-item measure with an optional group item, an additional section on personal characteristics and demographics, and three open-ended questions qualitatively assessing service likes and dislikes. The 30, 5-point Likert items are divided into two major factor-based scales, Practitioner Manner and Skill (9 items), and Perceived Outcome (8 items), and two supplementary smaller scales, Office Procedures (5 items) and Accessibility (4 items). Two items relating to Waiting may optionally be combined with the accessibility scale. Norms have been developed to date for primary care outpatients, mental health outpatients, employee assistance program clients, and DUI (driving under the influence) offenders, but not for forensic outpatients (Attkisson & Greenfield, 1994; T. Greenfield, personal communication, March 4, 1997).

Lending content and construct validity, item content incorporated a number of satisfaction domains that have been described in the literature, particularly interpersonal manner, technical quality, efficacy/outcome, accessibility/convenience, finances, physical environment, and availability. Experience with consumers and staff confirmed that the scale has good face validity. Good interrater reliability led to the conclusion that item content represented the satisfaction domain well. Item wording was deemed clear regardless of the level of psychopathology. Factorial invariance across health and mental health settings (4 types of settings) was found for the two major factors of Practitioner Manner and Skill, and Perceived Outcome. Factors involving Office Procedures and Accessibility were less stable across study sites (Attkisson & Greenfield, 1994).

Currently available reliability information on internal consistency using Cronbach's coefficient alpha has been reported as high for the two main subscales, ranging from .85 to .93 for Practitioner Manner and Skill, and from .80 to .90 for Perceived Outcome, and lower for the two minor subscales, ranging from .69 to .83 for Office Procedures, and from .60 to .75 for Access (Attkisson & Greenfield, 1994). Further, using the SSS-30 as a composite satisfaction measure, Cronbach's alpha values have ranged from .93 to .96.

Holden Psychological Screening Inventory

The Holden Psychological Screening Inventory (HPSI) was developed as a brief measure of the three major dimensions of psychopathology (Psychiatric Symptomatology, Social Symptomatology, and Depression Symptomatology) underlying the Minnesota Multiphasic Personality Inventory (MMPI) and the Basic Personality Inventory (BPI) (Holden, 1996). It is a brief alternative to longer measures and is well

suited for program evaluation endeavors with psychiatric and forensic populations over 14 years of age (Holden, 1996). The HPSI consists of 36, 5-point Likert items divided into three, 12-item primary scales, yielding a set of scores for the three dimensions of psychopathology and an overall score of Total Psychopathology (Holden, 1996). Psychiatric Symptomatology reflects generalized psychopathology encompassing psychotic processes, anxiety, and somatic preoccupations. Social Symptomatology comprises inadequate or deviant socialization and impulse control. Depression includes feelings of pessimism, loss of confidence in abilites, self-depreciation, and social introversion. Administration usually takes less than 10 minutes.

Adult norms for the HPSI were calculated from responses of 304 women and 259 men, based on a Canadian sample of 500 adult men and 500 adult women randomly selected from consumer mailing lists (Holden, 1996). Normative data has also been collected for high school students, young offenders, university students, psychiatric patients and psychiatric offenders (Holden, 1996). Holden cautions that since only 14.9% of the normative sample was non-White, use of the current adult HPSI norms is not recommended for other racial groups.

Internal consistency and test-retest stability are the primary indices of test reliability (Rogers, 1995). Across eight samples reported to date, the median coefficient alpha reliability was .74 for Psychiatric Symptomatology, .73 for Social Symptomatology, .84 for Depression, and .83 for Total Psychopathology. For the singular psychiatric offender sample (N=84) the coefficient alphas were .81, .79, and .87 for the three scales respectively. Holden (1996) contends these values represent extremely acceptable levels of internal consistency reliability for a screening inventory with only 12

items per scale. The singular investigation of test-retest reliability found reliabilities to exceed .83 for each HPSI scale (Holden, 1991: as cited in Holden 1996).

Item factor analysis in five samples, including psychiatric offenders, supports the internal structure of the HPSI and the appropriateness of its scoring key. In the psychiatric offender sample 33 of 36 items loaded most highly on their appropriate factors, and of the three that did not load highly, two did load in excess of .35 on their targeted components (Holden & Grigoriadis, 1995).

Validity coefficients for each HPSI scale, calculated by correlating patient self-report scale scores with clinical staff scale ratings, varied from .28 for Psychiatric Symptomatology to .75 for Depression. Holden (1996) suggests these results represent good support for the validity of the HPSI as a quick screen with psychiatric patients. There is also support for the validity of the HPSI's Total Psychopathology score as a validity index and the merits of proposed cutoff scores for indicating faking. Convergent validity has been demonstrated by substantial agreement with other multiscaled inventories of psychopathology and personality including the Minnesota Multiphasic Personality Inventory-2 (Holden & Grigoriadis, 1995), the Basic Personality Inventory (Holden & Grigoriadis, 1995), the Carlson Psychological Survey (Lawrence, 1995: cited in Holden,1996), and the Jackson Personality Inventory (Reddon et al, 1996b).

In an investigation of the psychometric properties of the HPSI in a psychiatric offender sample (Holden & Grigoriadis, 1995) it was found that HPSI scales were internally consistent and relatively independent, that the factor structure was appropriate and that the scoring key was confirmed, and that the HPSI demonstrated appropriately strong associations with related scales.

A number of threats to validity related to instrumentation were identified in the Chapter II literature review, including inconsistent instrument construction, lack of attention to the psychometric properties of the instruments, the use of response items singularly based on providers assumptions, inclusion of non-satisfaction items in instruments, using dichotomous or trichotomous response items which ordinally rank respondents, a lack of consideration of the relationship of satisfaction to life circumstances and diagnostic or psychiatric variables, and the use of quantitative surveys without attention to significant qualitative data. The instruments used in this study were chosen with these considerations in mind.

The Service Satisfaction Scale - 30 (SSS-30)(Greenfield & Attkisson, 1989) was considered the most reliable and valid multidimensional measure of satisfaction available at the time of the study. In this regard, the obtained SSS-30 data was subjected to reliability, scoring key congruence, correlational, and principal components analyses. Greenfield & Attkisson stated response items were based on consumer feedback and satisfaction research, and non-satisfaction items (e.g. life circumstances such as quality of life and health, and sociodemographics) were included only as optional items outside of the base instrument. Additionally, three optional questions gave respondents the opportunity to provide qualitative feedback relating to service likes and dislikes. These authors also asserted, with support from the literature (Holden, 1996; Rogers, 1995), that data generated by the 5-option Likert scales could be treated as continuous. The relevance of diagnostic or psychiatric variables to satisfaction was addressed in this study by simultaneous administration of the Holden Psychological Screening Inventory

(HPSI)(Holden, 1996), a measure of the psychiatric, depression, and social dimensions of psychopathology.

Procedures

Data were collected from November 3, 1997 to December 11, 1997 by a Research Assistant. The Research Assistant was unknown to any of the patients, and was the singular individual responsible for recruiting people into the study, giving directions, and administering the instruments. She attempted rigorously to provide the same information in the same manner to all potential and actual study participants.

Patients were approached face-to-face by the Research Assistant when they attended scheduled appointments at the clinic during the above time period. The Research Assistant verified and recorded which treatment program patients were attending by asking their name and confirming their status on a printout of all treatment patients registered at the clinic. The study purpose and format was briefly explained and patients were asked if they would participate. If patients expressed an initial willingness to participate, they were given a Consent Form (see Appendix A) to read, and sign if they agreed to participate in the study. Additionally, the Consent Form and its contents were explained by the Research Assistant. If patients agreed to participate in the study they were given a copy of the Consent Form to keep. The signed Consent Form was then attached to the instrument package.

Participants were advised by the Research Assistant that they were being asked to complete two instruments, one assessing their satisfaction with services, and the other assessing their level of adjustment. As the instrument package was handed out the Research Assistant recorded the patients F.A.C.S. file number and treatment program

being attended on the package Consent Form. Each instrument contained directions for completion which were as well explained to each participant by the Research Assistant immediately prior to administration. Administration occurred either in an office, a group room (when instruments were administered to patients attending group therapy sessions), or in the waiting room when this was requested by a patient. The Research Assistant was in attendance when instruments were being completed to provide clarifying information with respect to completion protocols. Patients were allowed as much time as required to complete the instruments. Patients were advised that a summary of the study results would be available for review six months after completion of the study.

Data Analysis

There is some debate as to whether or not psychological test scores, like those obtained by the SSS-30 and the HPSI, can be treated and analyzed as interval level data. The authors and users of the SSS-30 and the HPSI, like many authors and users of other scales in the social sciences field, treat their scales as interval level. Although Kerlinger (1973) has suggested that most scales are fundamentally ordinal, it has been offered that most scales have at least some interval properties, and that most test scores fall somewhere between the extremes represented by ordinal and interval levels of measurement (Rogers, 1995). Rogers adds that the extent to which scales provide useful indicators of important psychological concerns is probably more important than the level of measurement. In light of the above, and in accordance with the authors recommendations (Attkisson & Greenfield, 1994; Holden, 1996), data obtained from the SSS-30 and HPSI scales in this study was treated as interval level.

Descriptive statistics (SPSS, Version 8.0, 1998) including the mean, range and standard deviation were calculated by treatment program for the sociodemographic data. The multivariate analysis of variance procedure (SPSS, Version 8.0, 1998) was used to compare patient satisfaction and psychosocial adjustment by treatment program. Cronbach's Coefficient Alpha reliability analysis (SPSS, Version 8.0, 1998) was used to assess the internal consistency of the SSS-30 and HPSI scale and overall scores. Orthogonal procrustes [PROCRUS, Version 2.7 (Reddon, 1994)] was used to assess the correspondence of the SSS-30 and HPSI factor structure with their respective scoring keys. Principal components analysis at the item level, using the Minimum Average Partial (MAP) (Velicer, 1976) and Scree (Cattell & Vogelman, 1977) tests, was performed to determine the factor structure of the SSS-30 and HPSI scales. Correlational analysis (SPSS, Version 8.0, 1998) was used to determine the intercorrelations between and within the SSS-30 and HPSI scale and total scores. Principal components analysis (SPSS, Version 8.0, 1998) at the scale level was used to examine the factor structure of the SSS-30 and HPSI. Regression analysis (SPSS, Version 8.0, 1998) was used to determine the degree to which SSS-30 scale and total satisfaction could be predicted from HPSI scale and total scores. Canonical correlation analysis (BMDP, Version PC90, 1990) was used to determine the amount of the variance in the SSS-30 that was explainable by the HPSI.

Qualitative data, obtained from the three open-ended questions of the SSS - 30, was summarized by treatment program.

Ethical Considerations

The proposal for this study was reviewed and accepted by the Ethics Committee of the Faculty of Nursing at the University of Alberta, and by the Research and Ethics Committee of the Alberta Hospital, Edmonton. Signed consent was obtained from participants, or guardians, prior to administration of the instruments. Patients were advised that the purpose of the study was to improve clinic services, that participation was voluntary, and that they could withdraw from it at any time. Clients were advised that anonymity and confidentiality would be stringently maintained by not using patient names in reports of the study, using a code number on forms and question sheets, not sharing results with primary therapists or other clinic staff, and not entering results into their clinical file. They were also advised that all study forms and instruments would be secured in a locked cabinet for seven years after the study was done, then shredded. The consent form (see Appendix A) stated that only group summary data would shared with therapists, reported in the thesis or any other reports arising from the study, or provided to other researchers for secondary analysis.

CHAPTER IV

RESULTS

The purpose of this study was to determine the level of satisfaction, and the relationship between patient satisfaction and psychosocial adjustment, across 5 treatment programs (violent, sexual, mentally ill, and other adult offender, and young offender) in a forensic psychiatric outpatient population. The research questions previously posed will be addressed following the presentation and summary of data analysis results relating to sociodemographics, SSS-30 and HPSI descriptive statistics by treatment program, SSS-30 and HPSI reliability, scoring key congruence and correlational structure, and SSS-30 and HPSI intercorrelations.

Sociodemographic Findings

The sociodemographic data presented in this section was captured in the SSS-30 and includes age and gender, education level, yearly family income, ethnic background, number of weeks in treatment, number of treatment sessions attended, traveling distance to the clinic, feeling about life in general, and feeling about health in general.

Age and gender

The age and gender of respondents by treatment program is presented in Table 4-1a. Examination of this data reveals a mean overall respondent age of 34.6 years. The mean age for those receiving Young Offender treatment (16.7 years) is lower, due to treatment selection by age, than those receiving Adult Offender treatment (38.5 years). Amongst adults, those receiving Violent Offender treatment have the lowest mean age (36.4 years), while those receiving Mentally Ill Offender treatment have the highest mean age (39.9 years). Across all the Adult Offender treatment programs females tend to be

younger whilst the reverse is true for those receiving Young Offender treatment. However, the female sample size across treatment programs is small, most notably in the Sexual (N=1/61) and Young Offender (N=4/48) programs. The modal age range overall was 36-45 years (31.7%, N=84). Overall, 82% of the selected sample were male and 18% were female. Within adult treatment programs the highest percentage of females were receiving Other Offender treatment (41%) and the lowest percentage were receiving Sexual Offender treatment (1%).

Table 4-1a

Age and Gender by Treatment Program

Treatment Program	Gender	N	%	Mean Age in Years
Violent Offender	Male	42	78	36.0
	Female	12	22	37.6
	Total	54	100	36.4
Sexual Offender	Male	60	99	38.4
	Female	1	1	39.2
	Total	61	100	38.5
Mentally Ill Offender	Male	53	76	39.5
	Female	17	24	41.3
	Total	70	100	39.9
Other Adult Offender	Male	19	59	38.8
	Female	13	41	40.0
	Total	32	100	39.3
Young Offender	Male	44	92	16.8
	Female	4	8	16.1
	Total	48	100	16.7
Total Adult Offender	Male	174	80	38.2
	Female	43	20	39.8
	Total	217	100	38.5
Total Overall	Male	218	82	33.9
	Female	47	18	37.8
	Total	265	100	34.6

A comparison of the age and gender of the non-probability sample obtained, with the F.A.C.S. treatment program population, using data (generated for November 1, 1997) obtained from the F.A.C.S. Clinical Information System (this was not possible for other sociodemographic variables), is presented in Table 4-1b. Examination of this Table reveals that in terms of age the sample quite closely mirrors the population across

treatment programs, save perhaps for female violent offender treatment program members wherein the population is nearly 6 years younger on average. With respect to gender, the sample does not differ from the population by more than 9% across treatment programs. These findings suggest, at least in terms of age and gender, that the sample is quite representative of the population. Problematic in this regard, however, are potential limitations to generalizability presented by dissimilarities on variables including socioeconomic status, offense profile, psychiatric status, ethnic and cultural background, and the like.

Table 4-1b

Population and Sample Mean Age and Gender by Treatment Program

Treatment Program	% Male		Male Mean Age		% Female		Female Mean Age	
Violent Offender	86	(78)	35	(36)	14	(22)	32	(37.6)
Sex Offender	99	(99)	38	(38.4)	1	(1)	39	(39.2)
Mentally Ill Offender	84	(76)	39	(39.5)	16	(24)	39	(41.3)
Other Adult Offender	54	(59)	37	(38.8)	46	(41)	42	(40)
Young Offender	83	(92)	17	(16.8)	17	(8)	17	(16.1)
Overall Adult	82	(80)	37	(38.2)	18	(20)	38	(39.8)

Note. Sample values in brackets.

Education level

The education level of respondents by program and gender is presented in Table 4-2. Examination of this table reveals that 34 (76%) Young Offender treatment program respondents had not completed Grade 12, a finding which is seemingly unremarkable given the average respondent age of 16.7 years. Of adult offenders, 156 (65%) had

completed Grade 12 or better. Eleven individuals (4.2%) in the selected sample did not respond.

Table 4-2

Education Level by Program and Gender

Treatment Program	Gender	N	N < Gr. 12	% < Gr. 12
Violent Offender	Male	39	11	28
	Female	10	5	50
	Total	49	16	33
Sexual Offender	Male	59	18	31
	Female	1	0	0
	Total	60	18	30
Mentally Ill Offender	Male	52	19	37
	Female	17	6	35
	Total	69	25	36
Other Adult Offender	Male	18	8	44
	Female	13	6	46
	Total	31	14	45
Young Offender	Male	41	31	76
	Female	4	3	75
	Total	45	34	76
Total Adult Offender	Male	168	56	33
	Female	41	17	41
	Total	209	73	35
Total Respondents	Male	209	87	42
	Female	45	20	44
	Total	254	107	42

Yearly family income

The yearly family income for respondents is presented in Table 4-3. Examination of this table reveals that fully 72% of adult respondents have an annual family income of

less than $20,000. This ranged from a low of 55% for those in Sexual Offender treatment to a high of 89% for those in Mentally Ill Offender treatment. Forty-four individuals (16.6%) in the selected sample did not respond.

Table 4-3

Yearly Family Income by Program and Gender

Treatment Program	Gender	N	N < $20,000	% < $20,000
Violent Offender	Male	39	27	69
	Female	8	4	50
	Total	47	31	66
Sexual Offender	Male	55	30	55
	Female	1	1	100
	Total	56	31	55
Mentally Ill Offender	Male	47	40	85
	Female	15	15	100
	Total	62	55	89
Other Adult Offender	Male	17	13	76
	Female	12	10	83
	Total	29	23	79
Young Offender	Male	26	13	50
	Female	1	0	0
	Total	27	13	48
Total Adult Offender	Male	158	110	70
	Female	36	30	83
	Total	194	140	72
Total	Male	184	123	69
	Female	37	30	81
	Total	221	153	69

Ethnic background

The ethnic background for respondents is presented in Table 4-4. Examination of this table reveals that 183 individuals (73%) in the selected sample were Caucasian/White and that the next most prevalent ethnic background was Native/Indian (N=22, 9 %). Thirteen individuals (5%) in the selected sample did not respond.

Table 4-4

Caucasian/White (C/W) Ethnic Background by Program and Gender

Treatment Program	Gender	N	N C/W	% C/W
Violent Offender	Male	39	25	64
	Female	11	9	82
	Total	50	34	68
Sexual Offender	Male	58	43	74
	Female	1	1	100
	Total	59	44	75
Mentally Ill Offender	Male	50	39	78
	Female	16	11	69
	Total	66	50	76
Other Adult Offender	Male	17	15	88
	Female	13	10	77
	Total	30	25	83
Young Offender	Male	43	29	67
	Female	4	1	25
	Total	47	30	64
Total Adult Offender	Male	164	122	74
	Female	41	31	76
	Total	205	154	75
Total	Male	207	151	73
	Female	45	32	71
	Total	252	183	73

Number of weeks in treatment program

The number of respondents who had had been receiving treatment for >4 weeks at the forensic psychiatric outpatient clinic is presented in Table 4-5. Examination of this table reveals that 86% (N=222) of respondents had been in a treatment program for more than 4 weeks. Seven individuals (3%) did not respond.

Table 4-5

Number of Weeks >4 in Treatment by Program and Gender

Treatment Program	Gender	N	N >4	% >4
Violent Offender	Male	41	39	95
	Female	10	8	80
	Total	51	47	92
Sexual Offender	Male	60	50	83
	Female	1	1	100
	Total	61	51	84
Mentally Ill Offender	Male	53	48	91
	Female	17	16	94
	Total	70	64	91
Other Adult Offender	Male	18	17	94
	Female	13	10	77
	Total	31	27	87
Young Offender	Male	42	31	74
	Female	3	2	67
	Total	45	33	73
Total Adult Offender	Male	172	154	90
	Female	41	35	85
	Total	213	189	89
Total	Male	214	185	86
	Female	44	37	84
	Total	258	222	86

Number of treatment sessions

The number of treatment sessions >4 attended by the respondents is presented in Table 4-6. Examination of this table reveals that 79% (199) of respondents had attended more than 4 sessions. Fourteen individuals (5%) in the selected sample did not respond.

Table 4-6

Number of Treatment Sessions >4 Attended by Program and Gender

Treatment Program	Gender	N	N >4	% >4
Violent Offender	Male	40	36	90
	Female	10	7	70
	Total	50	43	86
Sexual Offender	Male	59	50	85
	Female	1	1	100
	Total	60	51	85
Mentally Ill Offender	Male	46	38	83
	Female	16	12	75
	Total	62	50	81
Other Adult Offender	Male	19	14	74
	Female	13	10	77
	Total	32	24	75
Young Offender	Male	43	29	67
	Female	4	2	50
	Total	47	31	66
Total Adult Offender	Male	164	138	84
	Female	40	30	75
	Total	204	168	82
Total	Male	207	167	81
	Female	44	32	73
	Total	251	199	79

Miles (1-way) from facility

The number of respondents who traveled >10 miles 1-way to attend treatment programming is presented in Table 4-7. Examination of this table reveals that 22% of Adult Offenders and 59% of Young Offenders traveled more than 10 miles, 1-way, to attend treatment. The lowest percentage traveling more than 10 miles, 1-way, was for those attending Mentally Ill Offender treatment (19%), a finding which is consistent with the sense that these individuals tend to live in the inner city area. Seven (2.6%) individuals did not respond.

Table 4-7

Distance Traveled in Miles >10 1-way From Facility by Program and Gender

Treatment Program	Gender	N	N >10	% >10
Violent Offender	Male	41	15	37
	Female	9	4	44
	Total	50	19	38
Sexual Offender	Male	60	17	28
	Female	1	0	0
	Total	61	18	30
Mentally Ill Offender	Male	53	7	13
	Female	16	6	38
	Total	69	13	19
Other Adult Offender	Male	19	2	11
	Female	13	5	38
	Total	32	7	22
Young Offender	Male	43	24	56
	Female	3	3	100
	Total	46	27	59
Total Adult Offender	Male	173	41	24
	Female	39	15	38
	Total	212	56	26
Total	Male	216	65	30
	Female	42	18	43
	Total	258	83	32

General feeling about life as a whole

The percentage of respondents feeling mostly satisfied or better about their life in general, and mean scores by treatment program, are presented in Table 4-8. Respondents were asked to indicate their general feeling on a 7-point Likert scale with the response options of: terrible(1)-unhappy(2)-mostly dissatisfied(3)-mixed(4)-mostly satisfied(5)-

pleased(6)-delighted(7). Means were calculated by summation of numerical anchors and the midpoint between the anchors was used to determine the relevant descriptor (e.g., >3.5 - 4.5 = mixed, >4.5 - 5.5 = mostly satisfied). Examination of Table 4-8 reveals that 55% of Adult Offender, and 72% of Young Offender, treatment program respondents felt mostly satisfied about life or better. The Mentally Ill and Other Adult offender treatment program respondents were marginally less satisfied. A oneway multivariate analysis of variance, and post hoc analysis using Tukey's HSD, revealed a statistically significant difference between the means of the Young Offender treatment program respondents, and both of the Mentally Ill ($p = .002$) and Other Adult ($p = .029$) offender treatment program respondents. It must be noted, however, that if the descriptor was determined strictly by the discrete anchor number then satisfaction for all treatment program groups, with the exception of Young Offenders, would be "mixed" (Mean = ≥ 4 - <5).

Table 4-8

Respondents Feeling Mostly Satisfied or Better About Life as a Whole by Program and Gender

Treatment Program	Gender	N	N ≥ Mostly Satisfied	%≥ Mostly Satisfied	Mean
Violent Offender	Male	41	23	56	
	Female	12	6	50	
	Total	53	29	55	4.64
Sexual Offender	Male	60	38	63	
	Female	1	0	0	
	Total	61	38	62	4.66
Mentally Ill Offender	Male	52	28	54	
	Female	17	6	35	
	Total	69	34	49	4.36
Other Adult Offender	Male	19	9	47	
	Female	13	8	62	
	Total	32	17	53	4.41
Young Offender	Male	43	31	72	
	Female	4	3	75	
	Total	47	34	72	5.36
Total Adult Offender	Male	172	98	57	
	Female	43	20	47	
	Total	215	118	55	4.52
Total	Male	215	129	60	
	Female	47	23	49	
	Total	262	152	58	4.67

Correlations of feelings about life as a whole with the SSS-30 total score and the HPSI scale and total scores are presented in table 4-9. Examination of this table reveals a low positive correlation with SSS-30 Total Satisfaction (.229), a moderate negative

correlation with HPSI Psychiatric Symptomatology, and high negative correlations with HPSI Depression Symptomatology (-.584) and HPSI Total (-.550). statistically significant difference between the mean of the Young Offender treatment program and both of the Mentally Ill Offender (p=.002) and Other Adult Offender (p=.029) treatment program means.

Table 4-9

Correlations of Feeling About Life as a Whole with SSS-30 Total and HPSI Scale and Total Scores

	Feeling About Life as a Whole
SSS-30 Total Satisfaction	.229*
HPSI Psychiatric Symptomatology	-.384*
HPSI Depression Symptomatology	-.584*
HPSI Social Symptomatology	-.187*
HPSI Total	-.550*

Note. * Correlation is significant at the 0.01 level (2-tailed)

Feeling about health in general

The percentage of respondents feeling mostly satisfied or better about their health in general, and mean scores by treatment program, are presented in Table 4-10. Respondents were asked to indicate their general feeling on a 7-point Likert with the

response options of: terrible(1)-unhappy(2)-mostly dissatisfied(3)-mixed(4)-mostly satisfied(5)-pleased(6)-delighted(7). Means were calculated by summation of numerical anchors and the midpoint between the anchors was used to determine the relevant descriptor (e.g., >3.5 - 4.5 = mixed, >4.5 - 5.5 = mostly satisfied). Examination of Table 4-10 reveals that 63% of Adult Offender, and 77% of Young Offender, treatment program respondents felt mostly satisfied about life or better. The Other Adult Offender treatment program respondents were less satisfied. A oneway multivariate analysis of variance, and post hoc analysis using Tukey's HSD, revealed a statistically significant difference between the mean of the Young Offender treatment program and both of the Mentally Ill Offender ($p=.009$) and Other Adult Offender ($p=.001$) treatment program means. It must be again noted that if the descriptor was determined strictly by the discrete anchor number then satisfaction for all treatment program groups, with the exception of Young Offenders, would be "mixed" (Mean = ≥ 4 - <5).

Table 4-10

Respondents Feeling Mostly Satisfied or Better About Health In General by Program and Gender

Treatment Program	Gender	N	N ≥ Mostly Satisfied	%≥ Mostly Satisfied	Means
Violent Offender	Male	41	28	68	
	Female	12	7	58	
	Total	53	35	66	4.87
Sexual Offender	Male	60	41	68	
	Female	1	0	0	
	Total	61	41	67	4.92
Mentally Ill Offender	Male	52	35	67	
	Female	17	9	53	
	Total	69	44	64	4.55
Other Adult Offender	Male	19	9	47	
	Female	13	6	46	
	Total	32	15	47	4.19
Young Offender	Male	43	35	81	
	Female	4	1	25	
	Total	47	36	77	5.45
Total Adult Offender	Male	172	113	66	
	Female	43	22	51	
	Total	215	135	63	4.63
Total	Male	215	148	69	
	Female	47	23	49	
	Total	262	171	65	4.82

Correlations of feelings about health in general with the SSS-30 total score and the HPSI scale and total scores are presented in table 4-11. Examination of this table reveals a low positive correlation with SSS-30 Total Satisfaction (.277) and high negative

correlations with HPSI Depression (-.525) and Psychiatric (-.520) Symptomatology, and HPSI Total Psychopathology (Psychosocial Adjustment) (-.588).

Table 4-11

Correlations of Feeling About Health in General with SSS-30 Total and HPSI Scale and Total Scores

Scale	Feeling About Health in General
SSS-30 Total Satisfaction	.277*
HPSI Psychiatric Symptomatology	-.520*
HPSI Depression Symptomatology	-.525*
HPSI Social Symptomatology	-.227*
HPSI Total	-.588*

Note. * Correlation is significant at the 0.01 level (2-tailed)

Sociodemographic Findings: Summary

Examination of the sociodemographic findings for those receiving Adult Offender treatment reveals a predominantly male, Caucasian sample with an average age of 38.5 years. Two-thirds had completed Grade 12 or better but three-quarters reported a yearly family income of less than $20,000. Over four-fifths of respondents had received treatment for more than 4 weeks and had attended 4 or more treatment sessions. Three-quarters reported traveling less than 10 miles, 1-way, to the clinic. Slightly over one-half of respondents reported feeling mostly satisfied or better about their life and health as a

whole. SSS-30 Total Satisfaction scores tended to increase (more satisfaction), and HPSI Symptomatology and Total scores tended to decrease (less pathology) as feelings about life and health improved.

Examination of the sociodemographic findings for those receiving Young Offender treatment reveals a predominantly male sample with an average age of 16.7 years. In contrast to the Adult Offenders only three-fifths of respondents were Caucasian. One-quarter had completed Grade 12 or better and approximately one-half reported a yearly family income of less than $20,000. Nearly three-quarters of respondents had received treatment for more than 4 weeks and had attended 4 or more treatment sessions. Slightly more than one-half reported traveling less than 10 miles, 1-way, to the clinic. Approximately three-quarters of respondents reported feeling mostly satisfied or better about their life and health as a whole. As for Adult Offenders, SSS-30 Total Satisfaction scores tended to increase (more satisfaction), and HPSI Symptomatology and Total scores tended to decrease (less pathology) as feelings about life and health improved.

It is apparent from the findings that the selected sample tends to be economically disadvantaged, particularly those receiving Adult Mentally Ill Offender treatment, and to a slightly lesser extent, those receiving Other Offender treatment. This may be connected to the finding that nearly one-half of the adult respondents feel less than mostly satisfied with life and health in general. The impact of these factors on satisfaction with services would seem to merit further investigation. The statistically significant differences found for feelings about life and health between those receiving Young Offender treatment, and those receiving Mentally Ill and Other Offender treatment, may be a function of age or life experiences, and the reality of better health, although this is conjecture. The finding

for all offenders that satisfaction increased and pathology decreased as feelings about life and health increased positively suggests a relationship that merits further investigation. It would seem reasonable that the less distressed one is by symptoms of illness that one feels better about life and health. However, the relationship between ostensibly "helping" services and feelings about life and health is more obscure.

SSS-30: Descriptive Statistical Findings By Treatment Program

Descriptive statistics (N, Mean, Standard Deviation, Range) related to SSS-30 scale and overall satisfaction for respondents in the five treatment programs (violent, sexual, mentally ill, and other adult offender, and young offender) are presented in this section. Descriptive statistics related to the SSS-30 scales (Practitioner Manner & Skill, Perceived Outcome, Office Procedures, Accessibility, Waiting) and total satisfaction are presented in Tables 4-12 to 4-17. Higher scores on the SSS-30 indicate greater satisfaction. Possible scores for each instrument scale item are 1,2,3,4, or 5, and scale and overall scores are calculated by addition. Response options and values range from terrible (1), mostly dissatisfied (2), mixed (3), mostly satisfied (4), to delighted (5).

Treatment Program Effect

A oneway multivariate analysis of variance with treatment program as the between groups factor and the five scales of the SSS-30 as variates indicated that the treatment program effect was not statistically significant (Wilks' $\lambda = .910$, $p = .219$).

The SSS-30 scale and total satisfaction scores are discussed, by treatment program, below.

Practitioner Manner and Skill

Descriptive statistics for the 9-item Practitioner Manner and Skill scale are presented in Table 4-12. The average level of satisfaction across the 9-item Practitioner Manner and Skill scale was 36.23, with an overall potential satisfaction score range 9 to 45. This suggests mean satisfaction was at 81% and that respondents were mostly satisfied or better (minimum mostly satisfied score = 36 or 80%). Average Practitioner Manner and Skill satisfaction scores ranged from 34.85 (77%) for Young Offender treatment program respondents (mixed satisfaction) to 37.67 (84%) for Sexual Offender treatment program respondents (mostly satisfied). The greatest variability in responding is seen in the Young Offender treatment program (S.D. 7.03; Range 36), and the least was seen in the Sexual Offender treatment program (S.D. 4.84; Range 19). A oneway analysis of variance indicated that Practitioner Manner and Skill did not differ significantly by treatment program ($F = 2.07$, $p = .086$)

Table 4-12

SSS-30 Scale: Practitioner Manner and Skill

Treatment Program	N	Mean	Standard Deviation	Range
Violent Offender	54	35.37	6.40	14-45 (31)
Sexual Offender	61	37.67	4.84	26-45 (19)
Mentally Ill Offender	70	36.14	5.65	24-45 (21)
Other Adult Offender	32	37.22	5.70	21-45 (24)
Young Offender	48	34.85	7.03	9-45 (36)
Total	265	36.23	5.97	9-45 (36)

Perceived Outcome

Descriptive statistics for the 8-item Perceived Outcome scale are presented in Table 4-13. The average level of satisfaction across the 8-item Perceived Outcome scale was 30.90, with an overall potential satisfaction score range 8 to 40. This suggests mean satisfaction was at 77 % and that the satisfaction level was mixed (minimum mostly satisfied score = 32 or 80%). Average Perceived Outcome satisfaction scores ranged from 30.13 (75%) for Violent Offender treatment program respondents (mixed satisfaction) to 32.03 (80%) for Sexual Offender treatment program respondents (mostly satisfied). The greatest variability in responding is seen in the Young Offender treatment program (S.D. 6.06; Range 32), and the least was seen in the Sexual Offender treatment program (S.D. 5.21; Range 21). A oneway analysis of variance indicated that Perceived Outcome did not differ significantly by treatment program ($F = 1.11$, $p = .355$)

Table 4-13

SSS-30 Scale: Perceived Outcome

Treatment Program	N	Mean	Standard Deviation	Range
Violent Offender	54	30.13	5.89	16-40 (24)
Sexual Offender	61	32.03	5.21	19-40 (21)
Mentally Ill Offender	70	30.49	5.56	16-40 (24)
Other Adult Offender	32	31.47	5.09	14-40 (26)
Young Offender	48	30.56	6.06	8-40 (32)
Total	265	30.90	5.59	8-40 (32)

Office Procedures

Descriptive statistics for the 5-item Office Procedures scale are presented in Table 4-14. The average level of satisfaction across the 5-item Office Procedures scale was

19.47, with an overall potential satisfaction score range 5 to 25. This suggests mean satisfaction was at 78 % and that the respondent satisfaction level was mixed (minimum mostly satisfied score = 20). Average Office Procedure satisfaction scores ranged from 18.91 (76%) for Violent Offender treatment program respondents (mixed satisfaction) to 20.22 (81%) for Other Adult Offender treatment program respondents (mostly satisfied). The greatest variability in responding is seen in the Young Offender treatment program (S.D. 3.54; Range 17), and the least was seen in the Sexual Offender treatment program (S.D. 2.76; Range 12). A oneway analysis of variance indicated that Office Procedures did not differ significantly by treatment program ($F = 1.12$, $p = .350$)

Table 4-14

SSS-30 Scale: Office Procedures

Treatment Program	N	Mean	Standard Deviation	Range
Violent Offender	54	18.91	3.52	10-25 (15)
Sexual Offender	61	19.75	2.76	13-25 (12)
Mentally Ill Offender	70	19.51	2.99	13-25 (12)
Other Adult Offender	32	20.22	2.96	13-25 (12)
Young Offender	48	19.17	3.54	8-25 (17)
Total	265	19.47	3.16	8-25 (17)

Accessibility

Descriptive statistics for the 4-item Accessibility scale are presented in Table 4-15. The average level of satisfaction across the 4-item Accessibility scale was 15.20, with an overall potential satisfaction score range of 4 to 20. This suggests mean satisfaction was at 76 % and that the respondent satisfaction level was mixed (minimum mostly satisfied score = 16). Average Accessibility satisfaction scores ranged from 14.77 (74%)

for Mentally Ill and Young Offender treatment program respondents (mixed satisfaction) to 15.94 (80%) for Other Adult Offender treatment program respondents (mixed satisfaction). The greatest variability in responding was seen in the Young Offender treatment program (S.D. 3.35; Range 16), and the least was seen in the Other Adult Offender treatment program (S.D. 2.06; Range 9). A oneway analysis of variance indicated that Accessibility did not differ significantly by treatment program ($F = 1.75$, $p = .140$)

Table 4-15

SSS-30 Scale: Accessibility

Treatment Program	N	Mean	Standard Deviation	Range
Violent Offender	54	15.15	2.65	10-20 (10)
Sexual Offender	61	15.69	2.48	9-20 (11)
Mentally Ill Offender	70	14.77	2.96	7-20 (13)
Other Adult Offender	32	15.94	2.06	11-20 (9)
Young Offender	48	14.77	3.35	4-20 (16)
Total	265	15.20	2.79	4-20 (16)

Waiting

Descriptive statistics for the 2-item Waiting scale are presented in Table 4-16. The average level of satisfaction across the 2-item Waiting scale was 7.70, with an potential satisfaction score range of 2 to10. This suggests that mean total satisfaction was at 77 % and that the respondent satisfaction level was mixed (minimum mostly satisfied score = 8). Average Waiting satisfaction scores ranged from 7.44 (74%) for Mentally Ill Offender treatment program respondents (mixed satisfaction) to 8.03 (80%) for Other Adult Offender treatment program respondents (mostly satisfied). The greatest variability in

responding is seen in the Mentally Ill Offender treatment program (S.D. 1.79; Range 8), and the least was seen in the Other Adult Offender treatment program (S.D. 1.33; Range 4). A oneway analysis of variance indicated that Waiting did not differ significantly by treatment program ($F = .93$, $p = .447$).

Table 4-16

SSS-30 Scale: Waiting

Treatment Program	N	Mean	Standard Deviation	Range
Violent Offender	54	7.67	1.60	2-10 (8)
Sexual Offender	61	7.82	1.32	4-10 (6)
Mentally Ill Offender	70	7.44	1.79	2-10 (8)
Other Adult Offender	32	8.03	1.33	6-10 (4)
Young Offender	48	7.73	1.59	2-10 (8)
Total	265	7.70	1.56	2-10 (8)

Total Satisfaction

Descriptive statistics for total or overall satisfaction are presented in Table 4-17. The average level of satisfaction across the five treatment programs was 109.50, in the context of 28 items and a potential total satisfaction score range 28 to 140. This suggests that mean total satisfaction was at 78 % and that respondents were slightly less than mostly satisfied (minimum mixed satisfaction score = 84; mostly satisfied minimum score = 112). Average total satisfaction scores ranged from 107.08 (76%) for Young Offender treatment program respondents (mixed satisfaction) to 112.97 (81%) for Sexual Offender treatment program respondents (mostly satisfied). The greatest variability in responding is seen in the Young Offender treatment program (S.D. 19.05; Range 106), and the least was seen in the Sexual Offender treatment program (S.D. 14.69; Range 64).

A oneway analysis of variance indicated that Total Satisfaction was not statistically significantly different by treatment program ($F = 1.58$, $p = .179$).

Table 4-17

SSS-30 Total Satisfaction

Treatment Program	N	Mean	Standard Deviation	Range
Violent Offender	54	107.22	17.74	66-139 (73)
Sexual Offender	61	112.97	14.69	76-140 (64)
Mentally Ill Offender	70	108.36	16.33	65-140 (75)
Other Adult Offender	32	112.88	14.69	71-139 (68)
Young Offender	48	107.08	19.05	31-137 (106)
Total	265	109.50	16.69	31-140 (109)

SSS-30: Descriptive Statistical Findings - Summary

Attkisson and Greenfield (1994) recommend comparing obtained scale scores with established norms. Unfortunately, there are no reports of SSS-30 results with a forensic outpatient or a remotely similar population currently receiving services. In this study the intent was to compare SSS-30 results across treatment programs. It was found that the treatment program effect was not statistically significant, within scales and overall. In this regard the individuals attending different treatment programs were equally satisfied (or not) with services provided.

With respect to the absence of external norms, Attkisson and Greenfield (1994) cite the utility of a comparative evaluation approach in which results are "self-normed", following repeated periodic SSS-30 administrations in the same context. To facilitate this comparison they recommend calculating subscale mean scores and mean item means.

With these summary calculations scores can also be referenced to the item anchors (e.g., a mean score of 3.5 would correspond to an average midway between "mixed satisfaction" and "mostly satisfied") and profile comparisons can be made. Subscale and total mean scores by treatment program are presented in Table 4-18. Examination of this table reveals that scores are primarily between "mixed satisfaction" and just "mostly satisfied". As well, they are quite similar, perhaps supporting the position taken by some authors that patient satisfaction scores are high and often undifferentiated (Deane, 1993; Dyck & Azim, 1983; Larsen et al., 1979; Margolis et al., 1977; Pascoe, 1983; Ruggeri & Dall'Agnola, 1993). Notwithstanding this lack of differentiation, the finding that satisfaction is mixed in many instances indicates that concerns with services do exist, and certainly, none of the respondent treatment groups, on average, appear "delighted" with services.

Table 4-18

SSS-30 Subscale and Total Mean Scores by Treatment Program

Treatment Program	Subscale/Total Mean Scores*					
	M	O	P	A	W	T
Violent Offender	3.9	3.8	3.8	3.8	3.8	3.8
Sexual Offender	4.2	4.0	4.0	3.9	3.9	4.0
Mentally Ill Offender	4.0	3.8	3.9	3.7	3.7	3.9
Adult Other Offender	4.1	3.9	4.0	4.0	4.0	4.0
Young Offender	3.9	3.6	3.8	3.7	3.9	3.8
Total	4.0	3.9	3.9	3.8	3.9	3.9

Note. * rounded to one decimal place; M = Manner and Skill, O = Outcome, P = Procedures, A = Accessibility, W = Waiting, T = Total Satisfaction.

In an attempt to more clearly identify areas of concern and to enhance comparability a ranked profile of mean item means is presented in Table 4-19.

Examination of this table is suggestive of respondents being "mostly" or more satisfied with respect to all but one Practitioner Manner and Skill scale item, and with Office Personnel, Amount of Help, an Appointment Times that Fit. One-Sample T Tests were conducted to determine whether the means of scale items with means less than 4.0 differed from a constant specified as 4.0 (the lowest score indicative of "mostly satisfied"). Statistically significant differences ($p < .01$, 2-tailed) were found for Explanations of Procedures, Opportunity to Choose Practitioner, Prescription (non-prescription of) Medications, Referrals When Needed, Contribution to Life Goals, Information on How to Get the Most From Services, Location and Accessibility, Urgent Care During Hours, Urgent Care After Hours, and Wait - At Appointment Time. It may be that these areas should targeted in terms of service improvement but this is problematic in that it is still unclear exactly what is needed in terms of improvement - one does not know what specific changes to make. A number of authors (Avis et al., 1997; Perrault et al, 1993; Polowczyk et al, 1993; Ross et al., 1993) have suggested that this problem may be due to inordinate reliance on quantitative surveys. Their conclusion that dissatisfaction may be more freely and precisely expressed in a qualitative context using, for example, open-ended questions, might be salient in this regard. As such, not only would scale and item mean scores be compared in future SSS-30 administrations but open-ended questions could be developed specific to the items found in previous surveys to be statistically significantly different from (less than) "mostly satisfied". Relevant to these issues in this administration was the fact that the SSS-30 contained three open-ended questions which asked respondents to provide additional comments.

Table 4-19

SSS-30 Mean Item Means

Item	Mean	SD	Scale
09 Listen & Understand	4.15	.89	Manner & Skill
16 Confidentiality & Respect	4.13	.97	Manner & Skill
06 Professional Knowledge & Competence	4.12	.91	Manner & Skill
10 Personal Manner of Practitioner	4.10	.92	Manner & Skill
01 Kind of Services Offered	4.06	.71	Manner & Skill
04 Office Personnel - Telephone or Personal	4.03	.94	Procedures
17 Amount of Help	4.03	1.00	Outcome
24 Thoroughness of Main Practitioner	4.03	.97	Manner & Skill
30 General Service Satisfaction	4.03	.92	Manner & Skill
13 Appointment Times That Fit	4.01	.96	Accessibility
03 Help With Problems	3.93	.94	Outcome
28 Handling of Records	3.91	.86	Procedures
15 Well-being & Prevention	3.91	.91	Outcome
05 Office Procedures	3.89	.88	Procedures
11 Wait - To Get Appointment	3.89	.94	Waiting
21 Effect - Symptom Relief	3.89	.96	Outcome
20 Explanations of Procedures	3.82	.91	Manner & Skill
26 Collaboration - Other Providers	3.81	.90	Procedures
19 Prescription (or Non-prescription) of Meds	3.81	1.10	Outcome
02 Opportunity To Choose Practitioner	3.81	1.02	Manner & Skill
07 Location & Accessibility	3.80	.96	Accessibility
12 Wait - At Appointment Time	3.80	.93	Waiting
25 Referrals When Needed	3.80	.96	Procedures, Outcome
29 Contribution to Life Goals	3.78	.97	Outcome
18 Info On How To Get Most From Services	3.75	.91	Outcome
22 Urgent Care During Hours	3.74	.99	Accessibility
23 Urgent Care After Hours	3.64	1.04	Accessibility

Note. SD = Standard Deviation

Qualitative Findings

The SSS-30 contained three open-ended questions which asked respondents to provide additional comments, if they wished, relating to the following:

1. "The thing that I have liked best about my experience here is":
2. "What I liked least was":
3. "If I could change one thing about this service it would be":

The information received from these questions will be summarized by treatment program following an overview of the response frequency.

The number of responses generated is presented by question and treatment program in Table 4-20. Examination of this table reveals that a total of 476 responses were generated by all respondents. Those receiving Violent Offender treatment were the highest responders (127) while those receiving Other Adult Offender treatment were the lowest (51). All treatment groups generated more responses for what they liked best and fewer responses for what they would change.

Table 4-20

SSS:30: Number of Responses to Open-ended Questions by Treatment Program

Treatment Program	Liked Best	Liked Least	Would Change	Total	N
Violent Offender	51	41	35	127	54
Sexual Offender	53	38	26	117	61
Mentally Ill Offender	47	31	30	108	70
Other Adult Offender	22	17	12	51	32
Young Offender	31	26	16	73	48
Total	204	153	119	476	265

Violent Offender treatment program responses

In terms of "the thing I have liked best" respondents emphasized group support and sharing with other patients, the support and help of staff, and learning how to control their anger. With respect to "what I liked least" respondents accented the waiting time for appointments or to see a worker, and the amount of time required to participate in treatment. Responses to "the one thing I could change" question centered on reducing the time commitment and providing faster service.

Sexual Offender treatment program responses

Regarding "the thing I have liked best" respondents emphasized the caring and compassion of staff, a supportive group and program environment, and learning how to deal with problems. Responses with respect to "what I liked least" included being mandated to attend treatment, the timing (in the evening) and length of groups, concerns regarding the confidentiality of names and personal information, and traveling distance.. In terms of the one thing that would be changed respondents suggested more one-to-one counseling, shorter group hours, and service provision in outlying areas to reduce travel difficulties.

Mentally Ill Offender treatment program responses

The support, care, and friendliness of staff was resolutely emphasized as "the thing I liked best". Comments regarding "what I liked least" were heavily focused on waiting for scheduled appointments. Respondents suggested, in terms of "changing one thing", a reduction in waiting time, and weekend and evening programming.

Other Adult Offender treatment program responses

Patients in this treatment program emphasized the support, care, and help received from staff as the "thing I liked best". There were no duplicate responses in terms of "what I liked least" or "the one thing I would change", however, decreased waiting for appointments and a desire for after-hours services appeared in both areas.

Young Offender treatment program responses

With respect to "the thing I liked best" the emphasis was on getting help, being able to talk about problems, and the supportive relationships with staff. Respondents identified being forced to attend and waiting for scheduled appointments as "what I liked least". The focus, in terms of "one thing I would change", was on being able to choose whether or not to attend for treatment.

In summary, the qualitative data suggests that what was primarily liked best was the support and care of staff, help and learning how to deal with problems, and a supportive group environment. This is consistent with the quantitative findings. The notion of satisfaction with a supportive group environment was included in the SSS-30 as an optional item ("if applicable") but responses were not captured in any of the scale or overall calculations. The mean item mean for "Support of Group" (N=206; not all respondents attended groups) was 3.94, indicating a satisfaction level of nearly "mostly satisfied". A One-Sample T Test revealed that this mean was not statistically significantly different (p=.318, 2-tailed) from a constant specified as 4.0 (the lowest score indicative of "mostly satisfied"). The emphasis in terms of what was liked least was on waiting for scheduled appointments and being mandated to attend for treatment. Suggestions for change included a reduction in waiting time and increased service provision outside of

regular hours. The compromised satisfaction with waiting is certainly consistent with the quantitative findings. The frustration with being mandated to attend for treatment is understandable as a majority of patients at the clinic attend under court or probation order and the threat of court-imposed sanctions for not attending. This, however, would not seem amenable to change without the clinic abdicating a responsibility, in the face of court orders, to provide treatment to those who pose serious threats to public safety. The suggestion for provision of services outside of regular hours merits further investigation in terms of what services are desired and exactly when these services should be provided. It appears, as well, that identified treatment program-specific concerns are amenable to further investigation with those groups. According to Attkisson and Greenfield (1994) content validity for the SSS-30 was supported modestly through correlation analyses of open-ended questions and SSS-30 items. In this study, a number of concerns arose which were not covered by the SSS-30 items, e.g. time commitment, forced treatment, traveling distance, treatment-type preferences, location of treatment, and programming outside of regular hours (non-urgent). This may point to the utility of adjunct qualitative approaches, or the need to revise SSS-30 items.

SSS-30: Reliability, Scoring Key Congruence, and Correlational Structure

Reliability

Cronbach's Coefficient Alpha reliability analysis was used to assess the internal consistency reliability of the five SSS-30 scales and the total scale. SSS-30 scale reliabilities are presented in Table 4-21. Examination of this table suggests excellent internal consistency for the total instrument (α=.945). The reliabilities for the five subscales are also quite good, especially for the longer scales. Review of the corrected

item-total correlations suggests item homogeneity in that none of the scales have items which do not correlate positively with the total test scores. The scale and 27-item average correlation values are moderate in magnitude and indicate a degree of commonality amongst test items. Principal components analysis at the item level, for each subscale and overall and using the MAP (Velicer, 1976) and Scree (Cattell & Vogelman, 1977) tests, revealed one principal component for the 27 items, and for the Manner and Skill, Perceived Outcome, and Office Procedures scales. In contrast to the MAP test, the Scree test also identified one principal component for the Accessibility and Waiting scales. It may be that Velicer's MAP test is somewhat conservative or, it may be that the 4-item Accessibility and 2-item Waiting scales are nondimensional, and do not measure that which they purport. In general, it appears these subscales and the total instrument are measures of a single attribute, or unidimensional.

Table 4-21

SSS-30 Scale Reliabilities

Scale	Number of Items	Coefficient Alpha (α)	Corrected Item-Total Correlations ≤ 0	Average Correlation	MAP/Scree Principal Components*
Manner & Skill	9	.887	0	.469	1/1
Perceived Outcome	8	.870	0	.462	1/1
Procedures	5	.735	0	.359	1/1
Accessibility	4	.665	0	.331	0/1
Waiting	2	.573	0	.402	0/1
Total	27	.945	0	.380	1/1

Note. *Minimum Average Partial (MAP) test (Velicer,1976); Scree test (Cattell & Vogelman, 1977)

Scoring Key Congruence

Orthogonal procrustes [PROCRUS, Version 2.7 (Reddon, 1994)], a confirmatory factor analytic procedure, was used to assess the correspondence of the SSS-30 factor structure with the scoring key. The number of random permutations for significance was 1,000,000. The resultant congruence coefficients, measures of the optimality or fit of the original scoring key (the degree to which items load on their respective scales more than on other scales), are presented in Table 4-22. Examination of this table reveals that Manner and Skill and Perceived Outcome fit very well, that Procedures and Waiting fit less well, and that Accessibility fits poorly.

Table 4-22

SSS-30 Scale Congruence Coefficients

Factor		Congruence Coefficient	Significance
1	(Manner and Skill)	.780	.0001200
2	(Perceived Outcome)	.769	.0003150
3	(Procedures)	.707	.0066640
4	(Accessibility)	.505	.3937500
5	(Waiting)	.671	.0063560

Correlational Structure

The intercorrelations among the SSS-30 scales are presented in Table 4.23. Examination of Table 4-23 reveals that each of the SSS-30 scale and total satisfaction means were positively correlated with each other at the 0.01 level (p=.000, in all cases). The magnitude of the correlation was highest between Total Satisfaction and each of Manner & Skill (r=.925), Perceived Outcome (r=.921), Procedures (r=.877), and

Accessibility (r=.790) scales , between Manner & Skill and each of Perceived Outcome (r=.793) and Procedures (r=.765) scales , and between Perceived Outcome and Procedures (r=.744) scales.

Table 4-23

SSS-30 Scale Intercorrelations

Scale	Manner & Skill	Perceived Outcome	Procedures	Accessibility	Waiting	Total Satisfaction
Manner & Skill	---	.793*	.765*	.626*	.555*	.925*
Perceived Outcome	---	---	.744*	.654*	.554*	.921*
Procedures	---	---	---	.689*	.527*	.877*
Accessibility	---	---	---	---	.531**	.790*
Waiting	---	---	---	---	---	.666*

Note.* Correlation is significant at the 0.01 level (2-tailed)

Principal Components Analysis

The results of the principal components analysis at the scale level, used to examine the factor structure of the five SSS-30 scales, is presented in Table 4-24. Five components were initially extracted, the first of which accounted for 71.82 % of the total variance, and the second of which accounted for 11.04 % of the total variance. The other 3 components cumulatively accounted for 16.83% of the total variance. Two components were rotated to a varimax criterion. Factor I is composed of salient loadings from the Manner & Skill (.858), Perceived Outcome (.856), Procedures (.877), and Accessibility (.745) scales, and Factor II only one salient loading which was the Waiting scale (.945).

The results of the principal components analysis presented in Table 4-20 indicate that there is good evidence for one underlying general factor (general satisfaction?) but with the rotated solution it would appear that the Waiting measure is somewhat distinct from the other 4 measures.

Table 4-24

SSS-30 Scale Factor Loadings

	Unrotated	Varimax Rotated	
Scale	Factor I	Factor I	Factor II
Manner & Skill	.891	.858	.287
Perceived Outcome	.892	.856	.293
Procedures	.887	.877	.245
Accessibility	.826	.745	.357
Waiting	.731	.317	.945
Variance	3.591	2.893	1.250
% Total	71.819	57.863	24.990

SSS-30: Reliability, Scoring Key Congruence, and Correlational Structure - Summary

Reliability findings in this study for the SSS-30, using Cronbach's Coefficient Alpha, are consistent with those reported in the literature (Attkisson & Greenfield, 1994). Internal reliability is good for the two main subscales (Manner & Skill - .887; Perceived Outcome - .87) and for the total instrument (.945), but lower for the remaining scales.

Principal components analysis at the item level using the Scree test provided evidence for one principal component for each subscale and overall (the MAP test failed to find a principal component for the Accessibility and Waiting subscales). This does not

support the contention that the SSS-30 is multidimensional as was found in previous studies (Greenfield & Attkisson, 1989) where two interpretable and two weaker factors were identified. Principal components analysis at the scale level provided good evidence for one underlying general factor, with the possibility that the Waiting scale is distinct from the other 4 scales.

Correlational analysis revealed that all of the subscales were significantly, highly, and positively correlated with total scale scores. As well, the subscales were similarly correlated with each other, with the exception of the Waiting scale which was moderately correlated with each of the other subscales. This finding seems to support the item- and scale-level principal components analysis results suggesting one overall factor and the Waiting scale being somewhat distinct.

Examination of congruence coefficients, calculated to evaluate the optimality or fit of the scoring key, revealed that Manner and Skill and Perceived Outcome fit very well, that Procedures and Waiting fit less well, and that Accessibility fits poorly.

In summary, although the SSS-30 has demonstrated good reliability in this study, further analysis of results has revealed a paucity of evidence for multidimensionality. Additional findings that scores were somewhat high and undifferentiated, and that there was no statistically significant difference in scores across treatment programs, are similarly relevant.

HPSI: Descriptive Statistics by Treatment Program

Descriptive statistics related to the HPSI scale and Total Psychopathology scores (hereafter referred to as psychosocial adjustment) for respondents in the five treatment programs are presented in this section. Lower scores on the HPSI indicate better

psychosocial adjustment. Descriptive statistics related to the HPSI scales (Psychiatric Symptomatology, Depression Symptomatology, Social Symptomatology) and Total Psychopathology scores are presented in Tables 4-25 - 4-28. Possible scores for each instrument scale item are 0,1,2,3, or 4, and scale and overall scores are calculated by addition. Scale and total score means are also converted to standardized T-scores for comparison related to the degree of psychopathology.

Treatment Program Effect

A oneway multivariate analysis of variance with treatment program as the between-groups factor and the three scales of the HPSI as variates indicated that the treatment program effect was statistically significant (Wilks' λ =.808, p = .000) Post hoc analysis with Tukey's honestly significant difference (HSD) test revealed that Psychiatric Symptomatology scale means were statistically significantly different between Mentally Ill Offender and Young Offender treatment programs (p=.048), and that significance was approached between Young Offender and Sexual Offender treatment program scale means (p=.052). Social Symptomatology scale means were statistically significantly different between the Young Offender treatment program and all other programs (Violent Offender, p=.000; Sexual Offender, p=.003; Mentally Ill Offender, p=.002; Other Adult Offender, p=.017). Statistically significant differences for Depression Symptomatology and for Total Psychosocial Adjustment were only approached, each between Violent and Mentally Ill Offender treatment programs (p = .087, p = .089, respectively).

Psychiatric Symptomatology

Descriptive statistics Psychiatric Symptomatology scale are presented in Table 4-25. by treatment program. Examination of this table reveals for this 12-item scale an overall sample mean of 11.48 within a potential range of 0 - 48. The largest group mean was 12.61, in the Sexual Offender treatment program, and the smallest was 9.33, in the Young Offender treatment program. The greatest variability in responding is seen in the Mentally Ill Offender treatment program (S.D. 7.29; Range 31), and the least was seen in the Sexual Offender treatment program (S.D. 4.89; Range 23). T-scores for the mean of each treatment group, and overall, are within the average (compared to the main normative base) range of 45 to 55. A oneway analysis of variance indicated that Psychiatric Symptomatology differed statistically significantly by treatment program ($F = 3.13$, $p = .015$).

Table 4-25

HPSI Scale: Psychiatric Symptomatology

Treatment Program	N	Mean	Standard Deviation	Range	T-score of Mean
Violent Offender	54	10.22	7.25	0-30 (30)	50
Sexual Offender	61	12.61	4.89	4-27 (23)	54
Mentally Ill Offender	70	12.54	7.29	0-31 (31)	54
Other Adult Offender	32	12.38	5.82	1-23 (22)	54
Young Offender	48	9.33	5.08	1-24 (23)	48
Total	265	11.48	6.35	0-31 (31)	52

Depression Symptomatology

Descriptive statistics for the 12-item Depression Symptomatology scale are presented in Table 4-26. Examination of this table reveals an overall sample mean of

21.11 within a potential range of 0 - 48. The largest group mean was 23.14, in the Mentally Ill Offender treatment program, and the smallest was 19.23, in the Young Offender treatment program. The greatest variability in responding is seen in the Mentally Ill Offender treatment program (S.D. 9.79; Range 47), and the least was seen in the Sexual Offender treatment program (S.D. 8.13; Range 32). T-scores for the means of the Mentally Ill (T=59) and Other Adult Offender (T=58) treatment groups, and overall (T=56), are slightly above the average (compared to the main normative base) range of 45 to 55. A oneway analysis of variance indicated that Depression Symptomatology differed statistically significantly by treatment program ($F = 2.54$, $p = .040$). However, this was not confirmed by Tukey's HSD post hoc analysis and a statistically significant difference was only approached, between Violent and Mentally Ill Offender treatment programs ($p = .087$).

Table 4-26

HPSI Scale: Depression Symptomatology

Treatment Program	N	Mean	Standard Deviation	Range	T-score of Mean
Violent Offender	54	19.30	8.51	0-37 (37)	53
Sexual Offender	61	21.00	8.13	6-38 (32)	55
Mentally Ill Offender	70	23.14	9.79	0-47 (47)	59
Other Adult Offender	32	22.75	7.24	12-47 (35)	58
Young Offender	48	19.23	7.25	5-42 (37)	53
Total	265	21.11	8.54	0-47 (47)	56

Social Symptomatology

Descriptive statistics for the 12-item Social Symptomatology scale are presented in Table 4-27. Examination of this table reveals an overall sample mean of 11.49 within a

potential mean of 0 - 48. The largest group mean was 15, in the Young Offender treatment program, and the smallest was 10.06, in the Violent Offender treatment program. The greatest variability in responding is seen in the Violent Offender treatment program (S.D. 6.39; Range 30), and the least was seen in the Sexual Offender treatment program (S.D. 3.69; Range 17). The T-score for the mean of the Young Offender (T=60) treatment group is above the average (compared to the main normative base) range of 45 to 55. A oneway analysis of variance indicated that Social Symptomatology differed statistically significantly between treatment programs (F = 5.61, p = .000).

Table 4-27

HPSI Scale: Social Symptomatology

Treatment Program	N	Mean	Standard Deviation	Range	T Score of Mean
Violent Offender	54	10.06	6.39	0-30 (30)	50
Sexual Offender	61	10.97	3.69	4-21 (17)	50
Mentally Ill Offender	70	10.90	6.72	0-27 (27)	50
Other Adult Offender	32	10.91	4.95	4-24 (20)	50
Young Offender	48	15.00	6.33	5-32 (27)	60
Total	265	11.49	5.60	0-32 (32)	53

Total (Psychopathology) Psychosocial Adjustment

Descriptive statistics for the 36-item Psychosocial Adjustment total are presented in Table 4-28. Examination of this table reveals an overall sample mean of 11.49 within a potential range of 0 - 144. The highest group mean was 46.59, in the Mentally Ill Offender treatment program, and the smallest was 39.57, in the Violent Offender treatment program. The greatest variability in responding is seen in the Mentally Ill Offender treatment program (S.D. 18.17; Range 91), and the least was in the Young

Offender treatment program (S.D. 11.57; Range 55). The T-scores for the means of the Violent Offender (T=51) and Young Offender (T=55) treatment groups, and overall (T=55) are within the average (compared to the main normative base) range of 45 to 55. The T-scores for the means of the Sexual Offender (T=56), Mentally Ill Offender (T=57), and Other Adult Offender (T=57) treatment groups, were slightly above average (compared to the main normative base). A oneway analysis of variance indicated that Total Psychosocial Adjustment was not statistically significantly different by treatment program ($F = 1.77$, $p = .135$).

Table 4-28

HPSI Total Psychosocial Adjustment

Treatment Program	N	Mean	Standard Deviation	Range	T Score of Mean
Violent Offender	54	39.57	17.52	4-80 (76)	51
Sexual Offender	61	44.57	13.21	19-76 (57)	56
Mentally Ill Offender	70	46.59	18.17	4-95 (91)	57
Other Adult Offender	32	46.03	13.99	22-84 (62)	57
Young Offender	48	43.56	11.57	17-72 (55)	55
Total	265	44.08	15.52	4-95 (91)	55

HPSI: Descriptive Statistics - Summary

Comparison of HPSI scale and Total scores revealed a statistically significant difference across treatment programs. Psychiatric Symptomatology scale means differed between Mentally Ill Offender treatment, and Young Offender treatment, respondents, with those receiving Mentally Ill Offender treatment reporting greater Psychiatric Symptomatology. This would seem reasonable given the fact that Mentally Ill Offender treatment is designed for those with serious mental illnesses (e.g. schizophrenia), and the

fact that the diagnosis of serious mental illness is infrequent in the Young Offender population seen at the outpatient clinic. Interestingly however, T-scores for the mean of Psychiatric Symptomatology for each treatment group, including the Mentally Ill Offender treatment group, fall within the average (compared to the main normative base) range.

Social Symptomatology scale means were statistically significantly different between Young Offender treatment program respondents, and all other treatment program respondents, with those receiving Young Offender treatment reporting greater Social Symptomatology. The cause of this is not readily apparent, but may be related to the relevance of social interactions in adolescence and the fact that many adolescents experience social interaction problems, albeit minor and transitory (Hansen, Giacoletti & Nangle, 1995). It may be that the Young Offender treatment population is more representative of those adolescents who have more extreme social problems, as their criminality (and not infrequent psychiatric diagnosis of Conduct Disorder) would imply. T-scores were above average (compared to the main normative base) only for the Young Offender treatment group respondents.

Statistically significant differences across treatment programs were only approached for Depression Symptomatology and Total Adjustment, between Violent and Mentally Ill offender treatment programs. T-scores for Depression Symptomatology were slightly above average (compared to the main normative base) for respondents receiving Mentally Ill and Other Adult Offender treatment. T-scores for total Psychosocial Adjustment were slightly above average (compared to the main normative base) for respondents receiving Sexual, Mentally Ill, and Other Adult Offender treatment, but

average (strongly agreeagreecompared to the main normative base) for those receiving Adult Violent and Young Offender treatment.

A comparison of current study results with reported normative data (mean and standard deviation) for psychiatric patients (Holden et al, 1992, in Holden, 1996), incarcerated psychiatric offenders (Lawrence, 1995, in Holden, 1996), and young offenders and high school students (Reddon et al, 1996b), is presented in Table 4-29. Male means were used given the predominantly male presence in the current study sample. Examination of this table suggests, first in terms of Psychiatric Symptomatology, that Young Offender treatment program respondents are less impaired than any of the other groups, including, unexpectedly, high school students. The finding that Young Offender treatment program respondents are less impaired that young offenders (in a young offender detention centre) seems reasonable and may be treatment related. The finding that Mentally Ill offender treatment respondents are less impaired than their psychiatric (in)patient counterparts may be related to return to the community and more stable mental status.

In terms of Depression Symptomatology, all current study treatment program respondents are less impaired than both psychiatric patients and psychiatric offenders. Interestingly, the Young Offender treatment program respondents and young offender group means are remarkably similar whereas it might be expected that detained individuals would be more impaired. The finding that detained psychiatric offenders are more impaired, and high schools students less impaired, than their respective cohorts would seem reasonable.

With respect to Social Symptomatology, all current study treatment program respondents, with the exception of Young Offender treatment program respondents, are less impaired than the comparison groups. The Young Offender treatment program respondents are less impaired than their detained cohorts, but more impaired than high school students. This latter finding seems reasonable given that one might expect adolescents in conflict with the law more likely to rebel against authority, act impulsively, and be argumentative (descriptors of high scorers on the Social Symptomatology scale (Holden, 1996)), than non-criminal cohorts.

In terms of overall Psychosocial Adjustment, all current study treatment program respondent groups are less impaired than the comparison groups, with the exception of Young Offender treatment program respondents and high school students.

Comparison of combined current study treatment program HPSI means indicates that the sample is less impaired with respect to Psychiatric Symptomatology than any of the comparison groups, that the sample is less impaired in terms of Depression Symptomatology than psychiatric patients and psychiatric offenders, that it is less impaired than all comparison groups in terms of Social Symptomatology, and that it is less impaired in terms of total Psychosocial Adjustment than psychiatric offenders alone. It must be stated, however, that due to the lack of availability of comparison study raw data it is not known whether the differences cited above are statistically significant.

Table 4-29

Comparison of HPSI Means

	n	P		D		S		T	
		M	SD	M	SD	M	SD	M	SD
Current Study Offender Treatment Program									
Violent	54	10.22	7.25	19.30	8.51	10.06	6.39	39.57	17.52
Sexual	61	12.61	4.89	21	8.13	10.97	3.69	44.57	13.21
Mentally Ill	70	12.54	7.29	23.14	9.79	10.90	6.72	46.59	18.17
Adult Other	32	12.38	5.82	22.75	7.24	10.91	4.95	46.03	13.99
Young	48	9.33	5.08	19.23	7.25	15.00	6.33	43.56	11.57
Overall	265	11.48	6.35	21.11	8.54	11.49	5.60	44.08	15.52
Psychiatric patients	30	14.77	7.44	25.07	9.62	14.5	5.75	54.33	15.47
Psychiatric offenders	277	15.98	7.34	24.82	8.32	14.83	7.50	55.63	16.52
Young offenders	50	13.34	6.21	19.30	7.54	22.76	9.12	55.4	15.53
High school students	28	12.54	4.73	16.54	5.81	13.54	8.26	42.61	13.06

Note. P = Psychiatric Symptomatology D = Depression Symptomatology
S = Social Symptomatology T = Total Psychosocial Adjustment
M = Mean SD = Standard Deviation n = number in sample

HPSI: Reliability, Scoring Key Congruence, and Correlational Structure

Reliability

Cronbach's Coefficient Alpha reliability analysis was used to assess the internal consistency reliability of the 3 HPSI subscales and the total scale. HPSI scale reliabilities are presented in Table 4-30. Examination of this table suggests good internal consistency for the total instrument (α=.877), and for the Psychiatric (α=.793), Depression (α=.884), and Social (α=.763) Symptomatology subscales. Review of the corrected item-total correlations suggests item homogeneity in that none of the scales have items which do

not correlate positively with the total test scores. The scale and 36-item average correlation values indicate a degree of commonality amongst test items. Principal components analysis at the item level using the MAP (Velicer, 1976) and Scree (Cattell & Vogelman, 1977) tests revealed two principal components for the Psychiatric Symptomatology scale, one each for the Depression and Social Symptomatology scales. The MAP revealed four, and the Scree two, principal components for the 36-items. These findings suggest that the HPSI is a multidimensional instrument.

Table 4-30

HPSI Scale Reliabilities

Scale	Number of items	Coefficient Alpha (α)	Corrected Item-Total Correlations ≤ 0	Average Correlation	MAP/Scree* Principal Components
Psychiatric Symptomatology	12	.793	0	.254	2/2
Depression Symptomatology	12	.884	0	.391	1/1
Social Symptomatology	12	.763	0	.216	1/1
Total	36	.877	0	.164	4/2

Note. *Minimum Average Partial (MAP) test (Velicer, 1976); Scree test (Cattell & Vogelman, 1977)

Scoring Key Congruence

Orthogonal procrustes [PROCRUS, Version 2.7 (Reddon, 1994)], a confirmatory factor analytic procedure, was used to assess the correspondence of the HPSI factor structure with the scoring key. The number of random permutations for significance was

1,000,000. The resultant congruence coefficients, measures of the optimality or fit (the degree to which items load on their respective scales more than on other scales) of the original scoring key, are presented in Table 4-31. Examination of this table reveals that the original scoring key was optimal. For the three scales not 1 of the 1,000,000 permutations resulted in a better fit than the original scoring key.

Table 4-31

HPSI Scale Congruence Coefficients

Factor		Congruence Coefficient	Significance
1	(Psychiatric Symptomatology)	.899	.0000010
2	(Social Symptomatology	.917	.0000010
3	(Depression Symptomatology)	.949	.0000010

Correlational Structure

The intercorrelations among the HPSI scales presented in Table 4-32. Examination of this table reveals that each of the HPSI scale and total psychosocial adjustment scores were positively correlated with each other at the 0.01 level (p=.000, in all cases). The magnitude of the correlation is high between total Psychosocial Adjustment and each of Psychiatric (r=.780) and Depression (r=.789) Symptomatology scales, and moderate (r=.639) between the total Psychosocial Adjustment and Social Symptomatology scales.

Table 4-32

HPSI Scale Intercorrelations

Scale	Psychiatric Symptomatology	Depression Symptomatology	Social Symptomatology	Total Psychosocial Adjustment
Psychiatric Symptomatology	---	.413*	.372*	.780*
Depression Symptomatology	---	---	.182*	.789*
Social Symptomatology	---	---	---	.639*

Note. * Correlation is significant at the 0.01 level (2-tailed)

Principal Components Analysis

The results of the principal components analysis used to examine the factor structure of the three HPSI scales (loadings on the first unrotated principal component and the loadings on the two varimax rotated factors) are presented in Table 4-33. Three components were initially extracted, the first of which accounted for 55.12 % of the total variance, with the second and third components accounting for 27.31 %, and 17.56% respectively. Two components were rotated to a varimax criterion. Factor I is composed of salient loadings from all three scales (Psychiatric = .929, Depression = .713, Social = .672), whereas Factor II had one salient loading from the Depression (.506) and Social Symptomatology (.953) scales, but not the Psychiatric Symptomatology (.329) scale. Overall it would appear that the one factor solution (overall psychosocial adjustment?) fits well in the order of Psychiatric>Depression>Social.

Table 4-33

HPSI Scale Factor Loadings

Scale	Unrotated	Varimax Rotated	
	Factor I	Factor I	Factor II
Psychiatric Symptomatology	.833	.929	.329
Depression Symptomatology	.713	.663	.506
Social Symptomatology	.672	.762	.953
Variance	1.654	1.308	1.165
% Total	55.124	43.598	36.836

HPSI: Reliability, Scoring Key Congruence, and Correlational Structure - Summary

Reliability findings in this study for the HPSI, using Cronbach's Coefficient Alpha, are consistent with the median of those reported in the eight samples identified by Holden (1996). The coefficient alphas found in this study, .793 for Psychiatric Symptomatology, .884 for Depression Symptomatology, .763 for Social Symptomatology, and .877 for total Psychosocial Adjustment, exceed the reported medians and suggest good internal consistency reliability.

Principal components analysis, at the item level, provided evidence that the HPSI is a multidimensional instrument, and at the scale level, a one factor solution (overall psychosocial adjustment) fit well in the order of Psychiatric>Depression>Social.

Examination of congruence coefficients, calculated to evaluate the optimality or fit of the HPSI scoring key, revealed that the original scoring key was optimal.

Correlational analysis revealed that each of the subscales were significantly, highly and positively correlated with the total score. The subscales were less highly correlated with each other - the Psychiatric Symptomatology scale was moderately correlated with both the Depression and Social Symptomatology scales, and the correlation between the Depression and Social Symptomatology scales was low. This finding seems to support the principal components analysis results suggesting that the HPSI is a multidimensional instrument.

SSS-30 and HPSI: Intercorrelations

Correlation Analysis

Data with respect to SSS-30 and HPSI scale and total bivariate correlations is presented in Table 4-34. Examination of this table reveals that correlations tend to be negative, significant, and generally low in magnitude. No significant correlation was found between HPSI Psychiatric Symptomatology and any of the SSS-30 scales or total score. HPSI Depression Symptomatology correlated significantly with all SSS-30 scales and total score, and HPSI Social Symptomatology and total score correlated significantly with all SSS-30 scales, and total score, except Waiting.

Table 4-34

SSS-30 and HPSI Intercorrelations

Scale	Psychiatric Symptomatology	Depression Symptomatology	Social Symptomatology	Total Psychosocial Adjustment
Manner and Skill	.043	-.138*	-.247**	-.154*
Perceived Outcome	-.071	-.243**	-.312**	-.283**
Procedures	-.028	-.167**	-.256**	-.202**
Accessibility	-.060	-.179**	-.256**	-.202**
Waiting	.061	-.188**	-.079	-.109
Total Satisfaction	-.018	-.210**	-.291**	-.235**

Note. * Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Regression Analysis

Regression analysis was used to determine the degree to which the SSS-30 scales and total satisfaction could be predicted from HPSI Psychiatric, Depression, and Social Symptomatology scale scores. Results by SSS-30 scale and total satisfaction are presented in Table 4-35. Examination of this table reveals that the percentage of variance in the SSS-30 scale and overall scales explained by the HPSI scales ranges from 5.8% to 15%. SSS-30 Perceived Outcome (15%) ,Total Satisfaction (13.9%), and Manner and skill (10.8%), have the highest percentage of variance explained by the HPSI.

Table 4-35

Regression Analysis: Prediction of the SSS-30 From HPSI Scale Scores

	Unstandardized Coefficient B*					
SSS-30	Intercept	PS	DS	SS	R	R^2
Total	123.449	.521	-.456	-.896	.373	.139
Manner & Skill	39.820	.214	-.124	-.297	.329	.108
Perceived Outcome	36.253	.133	-.162	-.302	.388	.150
Procedures	21.693	.075	-.066	-.147	.311	.097
Accessibility	17.365	---	-.045	-.106	.286	.082
Waiting	8.219	.041	-.047	---	.241	.058

Note. * all listed unstandardized coefficients significant at $\alpha \leq 0.03$
R = multiple correlation, R^2 = squared multiple correlation, PS = HPSI Psychiatric Symptomatology scale. DS = HPSI Depression Symptomatology scale, SS = HPSI Social Symptomatology scale

Canonical Correlation Analysis

The loadings on canonical variates, canonical correlations, significance and redundancy (the variance in one set explainable from the other set) are presented in Table 4-36. The results of the canonical analysis indicate that the first two canonical correlations are statistically significant, although even the third does approach significance. However, for all intents and purposes there is really only one significant correlation because for the second and third correlation the redundancy vanishes. The first canonical correlation is due to the Depression and Social Symptomatology scales from the HPSI side and all five SSS-30 subscales from the satisfaction side. The first canonical

variate for the HPSI explains 9.4% of the variance in the SSS-30. The second canonical variate is only associated with 0.7% of the variance in the SSS-30. The third canonical variate was not significant and only 0.2% of variance in the SSS-30 was explained by the HPSI. The results of this canonical analysis are consistent with the results that were obtained with the regression analysis but provide a more general statement of the relationship between the HPSI and the SSS-30.

Table 4-36

Canonical Variate Loadings, Correlations, Significance, and Redundancy

	Canonical Variates		
	I	II	III
HPSI Scale			
Psychiatric Symptomatology	.224	.824	.521
Depression Symptomatology	.608	-.156	.778
Social Symptomatology	.837	.434	-.333
SSS-30 Scale			
Practitioner Manner & Skill	-.780	.406	.477
Perceived Outcome	-.982	.108	-.033
Office Procedures	-.782	.143	.194
Accessibility	-.756	.022	.041
Waiting	-.506	.766	-.317
Canonical R	.394	.211	.167
Significance(p)	.000	.014	.062
Redundancy			
HPSI	.058	.013	.009
SSS-30	.094	.007	.002

SSS-30 and HPSI: Intercorrelations - Summary

Correlation analysis between SSS-30 subscale and overall scores, and HPSI subscale and overall scores, revealed that there was no significant correlation between Psychiatric Symptomatology subscale scores and the SSS-30 subscale and overall scores. This was somewhat unexpected given that symptomatology has recently been more strongly linked to satisfaction in the literature (Carscaddon, George, & Wells, 1990; Deane, 1993; Gaston & Sabourin, 1992; Marshall et al., 1996). It is, however, consistent with the HPSI finding that Psychiatric Symptomatology scores fell within the average range (compared to the main normative base) for all treatment program respondents. This itself though, was unexpected, given that the clinic population, especially the mentally ill offender treatment group, are often diagnosed with mental disorders. Correlations between Depression Symptomatology, Social Symptomatology, and Total Psychopathology, and SSS-30 subscale and overall scores, although significant, were negative and low to moderate in magnitude. This suggests a tendency for satisfaction to decrease as Depression and Social Symptomatology, and Total Psychopathology, increased (wherein an increased Total Psychopathology score = a decreased level of Psychosocial Adjustment). The strongest significant correlations were between Social Symptomatology, and Perceived Outcome ($r = -.312$) and Total Satisfaction ($r = -.291$). Of all SSS-30 subscales and Total Satisfaction, the Perceived Outcome scale had the strongest correlations with all HPSI subscales and total scores. Of all the HPSI subscales and Total Psychopathology (Psychosocial Adjustment), the Social Symptomatology subscale had the strongest correlations with all SSS-30 subscales (excluding Waiting) and Total Satisfaction. These results offer a modicum of support for recent studies which have

found satisfaction negatively correlated with symptom severity (Carscaddon, George, & Wells, 1990; Deane, 1993; Gaston & Sabourin, 1992) and mental health status (Marshall et al., 1996). It has recently been hypothesized, albeit in a medical context, that this negative correlation may be a function of poor health producing dissatisfaction directly, and/or of poor health compromising the perceived or actual psychosocial responsiveness of the caregiver, thus mediating dissatisfaction (Hall, Milburn, Roter & Daltroy, 1998). If, as intimated above, satisfaction were a function of symptomatology it would seem reasonable to expect that symptom change would result in a parallel satisfaction change. However, this has not been supported in the literature and it has recently been suggested that there is no relationship between therapeutic change and satisfaction (Pekarik & Wolff, 1996).

Regression analysis suggested that HPSI subscale scores had low-medium capacity in terms of predicting SSS-30 Perceived Outcome and Manner and Skill subscale, and Total Satisfaction, scores. The SSS-30 scales predicted best by the HPSI scales were Perceived Outcome, Total Satisfaction , and Manner and Skill. These findings are not remarkably dissimilar to the results of the canonical correlation analysis, wherein the first canonical variate explained 9.4% of the variance in the SSS-30.

Research Questions

The purpose of this study was to determine the relationship between patient satisfaction and psychosocial adjustment across 5 treatment programs (violent, sexual, mentally ill, and other adult offender, and young offender) in a forensic psychiatric outpatient population. The research questions listed at the conclusion of Chapter I will be addressed sequentially:

What is the level of patient satisfaction with services across treatment programs?

It was found that the treatment program effect was not statistically significant, across subscales and the total scale. Subscale and total mean scores were primarily between "mixed satisfaction" and just "mostly satisfied". The finding that satisfaction was mixed in many instances indicates that concerns with services exist, and certainly, none of the respondent treatment groups, on average, appear "delighted" with services.

With what, specifically, are patients satisfied and dissatisfied?

Analysis of SSS-30 overall mean item means suggested respondents were "mostly" or more satisfied with respect to all but one Practitioner Manner and Skill scale item, and with Office Personnel, Amount of Help, an Appointment Times that Fit. One-Sample T Tests (on means less than 4.0 differing from a constant specified as 4.0, the lowest score indicative of "mostly satisfied") revealed statistically significant differences ($p < .01$, 2-tailed) for Explanations of Procedures, Opportunity to Choose Practitioner, Prescription (non-prescription of) Medications, Referrals When Needed, Contribution to Life Goals, Information on How to Get the Most From Services, Location and Accessibility, Urgent Care During Hours, Urgent Care After Hours, and Wait - At Appointment Time. It may be that these areas should targeted in terms of service improvement but this is problematic in that it is still unclear exactly what is needed in terms of improvement for many of them.

The most frequent responses to the three open-ended questions of the SSS-30 suggested that what was primarily liked best was the support and care of staff, help and learning how to deal with problems, and a supportive group environment. This is consistent with the quantitative findings. The emphasis in terms of what was liked least

was on waiting for scheduled appointments and being mandated to attend for treatment. Suggestions for change included a reduction in waiting time and increased service provision outside of regular hours. The compromised satisfaction with waiting is certainly consistent with the quantitative findings. The frustration with being mandated to attend for treatment is understandable as a majority of patients at the clinic attend under court or probation order and the threat of court-imposed sanctions for not attending. A number of concerns identified in response to the open-ended questions were not addressed by the SSS-30 items, including time commitment, forced treatment, traveling distance, treatment-type preferences, location of treatment, and programming outside of regular hours (non-urgent).

What is the level of psychosocial adjustment across treatment programs?

Comparison of HPSI scale and Total scores revealed a statistically significant difference across treatment programs. Psychiatric Symptomatology scale means differed between Mentally Ill Offender treatment, and Young Offender treatment, respondents, with those receiving Mentally Ill Offender treatment reporting greater Psychiatric Symptomatology. This would seem reasonable given the fact that Mentally Ill Offender treatment is designed for those with serious mental illnesses (e.g. schizophrenia), and the fact that the diagnosis of serious mental illness is infrequent in the Young Offender population seen at the outpatient clinic. Interestingly however, T-scores for the mean of Psychiatric Symptomatology for each treatment group, including the Mentally Ill Offender treatment group, fall within the average (compared to the main normative base) range.

Social Symptomatology scale means were statistically significantly different between Young Offender treatment program respondents, and all other treatment program respondents, with those receiving Young Offender treatment reporting greater Social Symptomatology. The cause of this is not apparent, but may be related to the fact that there is a large number of adolescents with a diagnosis of Conduct Disorder receiving Young Offender treatment at the outpatient clinic. T-scores were above average (compared to the main normative base) only for the Young Offender treatment group respondents.

Statistically significant differences across treatment programs were only approached for Depression Symptomatology and Total Adjustment, between Violent and Mentally Ill offender treatment programs. T-scores for Depression Symptomatology were slightly above average (compared to the main normative base) for respondents receiving Mentally Ill and Other Adult Offender treatment. T-scores for total Psychosocial Adjustment were slightly above average (compared to the main normative base) for respondents receiving Sexual, Mentally Ill, and Other Adult Offender treatment, but average (compared to the main normative base) for those receiving Adult Violent and Young Offender treatment.

What is the nature of the relationship between satisfaction and psychosocial adjustment?

Correlation analysis between SSS-30 subscale and overall scores, and HPSI subscale and overall scores, revealed that there was no significant correlation between Psychiatric Symptomatology subscale scores and the SSS-30 subscale and overall scores. This was somewhat unexpected given that symptomatology has recently been more

strongly linked to satisfaction (Carscaddon, George, & Wells, 1990; Deane, 1993; Gaston & Sabourin, 1992; Marshall et al., 1996). Correlations between Depression Symptomatology, Social Symptomatology, and total Psychosocial Adjustment subscales, and SSS-30 subscale and overall scores, although significant, were negative and generally low in magnitude. This suggests a tendency for satisfaction to decrease as Depression and Social Symptomatology, and Total Psychopathology (Psychosocial Adjustment), scores, increased. Of all SSS-30 subscales, and Total Satisfaction, the Perceived Outcome scale had the strongest correlations with all HPSI subscales and total scores. Of all the HPSI subscales and Total Psychosocial Adjustment, the Social Symptomatology subscale had the strongest correlations with all SSS-30 subscales (excluding Waiting) and Total Satisfaction.

Regression analysis suggested that HPSI subscale scores had modest predictive capacity in terms of SSS-30 subscale and total satisfaction scores, and these findings are supported in a more general sense by the results of the canonical correlation analysis.

CHAPTER V

DISCUSSION

A overview of the major findings in this study is presented, followed by a discussion of implications, limitations and suggested directions for future research.

Overview of Major Findings

Major findings related to sociodemographics, symptomatology and psychosocial adjustment, satisfaction, and instrumentation are presented.

Sociodemographic findings

Examination of the sociodemographic findings for those receiving Adult Offender treatment reveals a predominantly male, Caucasian sample with an average age of 38.5 years. Two-thirds had completed Grade 12 or better but three-quarters reported a yearly family income of less than $20,000. Over four-fifths of respondents had received treatment for more than 4 weeks and had attended 4 or more treatment sessions. Three-quarters reported traveling less than 10 miles, 1-way, to the clinic. Slightly over one-half of respondents reported feeling mostly satisfied or better about their life and health as a whole. SSS-30 Total Satisfaction scores tended to increase (more satisfaction), and HPSI Symptomatology and Total scores tended to decrease (less pathology) as feelings about life and health improved.

Examination of the sociodemographic findings for those receiving Young Offender treatment reveals a predominantly male sample with an average age of 16.7 years. In contrast to the Adult Offenders only three-fifths of respondents were Caucasian. One-quarter had completed Grade 12 or better and approximately one-half reported a yearly family income of less than $20,000. Nearly three-quarters of respondents had

received treatment for more than 4 weeks and had attended 4 or more treatment sessions. Slightly more than one-half reported traveling less than 10 miles, 1-way, to the clinic. Approximately three-quarters of respondents reported feeling mostly satisfied or better about their life and health as a whole. As for Adult Offenders, SSS-30 Total Satisfaction scores tended to increase (more satisfaction), and HPSI Symptomatology and Total scores tended to decrease (less pathology) as feelings about life and health improved.

Symptomatology and psychosocial adjustment findings

Comparison of HPSI subscale (symptomatology)and Total (psychosocial adjustment) scores revealed a statistically significant difference across treatment programs. Psychiatric Symptomatology scale means differed between Mentally Ill Offender treatment, and Young Offender treatment, respondents, with those receiving Mentally Ill Offender treatment reporting greater Psychiatric Symptomatology. However, T-scores for the mean of Psychiatric Symptomatology for each treatment group, including the Mentally Ill Offender treatment group, fall within the average range.

Social Symptomatology scale means were statistically significantly different between Young Offender treatment program respondents, and all other treatment program respondents, with those receiving Young Offender treatment reporting greater Social Symptomatology. T-scores were above average (compared to the main normative base) only for the Young Offender treatment group respondents.

Statistically significant differences across treatment programs were only approached for Depression Symptomatology and Total Psychosocial Adjustment, between Violent and Mentally Ill offender treatment programs. T-scores for Depression Symptomatology were slightly above average (compared to the main normative base) for

respondents receiving Mentally Ill and Other Adult Offender treatment. T-scores for total Psychosocial Adjustment were slightly above average (compared to the main normative base) for respondents receiving Sexual, Mentally Ill, and Other Adult Offender treatment, but average for those receiving Adult Violent and Young Offender treatment.

Satisfaction Findings

Differences in treatment program scores, between SSS-30 subscales and overall, were not found to be statistically significant. Examination of mean subscale and mean total mean scores indicated that scores were primarily between "mixed satisfaction" and just "mostly satisfied", and quite undifferentiated. Notwithstanding this lack of differentiation, the finding that satisfaction is mixed in many instances indicates that concerns with services do exist, and certainly, none of the respondent treatment groups, on average, appear "delighted" with services. Examination of mean item means indicates respondents were "mostly" or more satisfied with respect to all but one Practitioner Manner and Skill scale item, and with Office Personnel, Amount of Help, and Appointment Times that Fit. Satisfaction was "mixed" for the remainder of the items, and based on one sample t tests with a constant of 4.0 (the lowest score indicative of "mostly satisfied") statistically significant differences ($p < .01$, 2-tailed) were found for Explanations of Procedures, Opportunity to Choose Practitioner, Prescription (non-prescription of) Medications, Referrals When Needed, Contribution to Life Goals, Information on How to Get the Most From Services, Location and Accessibility, Urgent Care During Hours, Urgent Care After Hours, and Wait - At Appointment Time.

Responses to the 3 open-ended questions of the SSS-30 indicated that what was liked best was the support and care of staff, help and learning how to deal with problems,

and a supportive group environment. This is consistent with the quantitative findings. The emphasis in terms of what was liked least was on waiting for scheduled appointments and being mandated to attend for treatment. Suggestions for change included a reduction in waiting time and increased service provision outside of regular hours. The compromised satisfaction with waiting is certainly consistent with the quantitative findings. The suggestion for provision of services outside of regular hours merits further investigation in terms of what services are desired and exactly when these services should be provided. In this study, a number of concerns were identified which were not covered by the SSS-30 items, e.g. time commitment, forced treatment, traveling distance, treatment-type preferences, location of treatment, and programming outside of regular hours (non-urgent).

Satisfaction, symptomatology, and psychosocial adjustment correlational findings

Correlation analysis between SSS-30 subscale and overall scores, and HPSI subscale and overall scores, revealed that there was no significant correlation between Psychiatric Symptomatology subscale scores and the SSS-30 subscale and overall scores. Correlations between Depression Symptomatology, Social Symptomatology, and total Psychosocial Adjustment subscales, and SSS-30 subscale and overall scores, although significant, were negative and modest in magnitude.

Regression analysis suggested that HPSI subscale scores were modest predictors of SSS-30 subscale and total satisfaction scores, and that the SSS-30 scales predicted best by the HPSI scales were Perceived Outcome and Total Satisfaction.

Instrumentation Findings

Internal reliability was found to be good for the two SSS-30 main subscales (Manner & Skill and Perceived Outcome) and for the total instrument, but lower for the remaining scales. Principal components analysis of the SSS-30 at the item level provided evidence for one principal component for each SSS-30 subscale and overall thus not supporting the contention that the SSS-30 is multidimensional. Principal components analysis at the scale level provided good evidence for one underlying general factor (total satisfaction?), with the possibility that the Waiting scale is distinct from the other 4 scales. Correlational analysis revealed that all of the SSS-30 subscales were significantly, highly, and positively correlated with total scale scores, and with each other (with the exception of the Waiting scale which was moderately correlated with each of the other subscales).

Reliability findings in this study for the HPSI suggest good internal consistency reliability. Principal components analysis at the item level provided evidence suggesting the HPSI is a multidimensional instrument. Analysis at the scale level provided good evidence for a one factor solution in the order of Psychiatric>Depression>Social. Correlational analysis revealed that each of the HPSI subscales were significantly, highly and positively correlated with the total score, and that the subscales were less highly correlated with each other.

Implications and Limitations

The purpose of this study was to obtain satisfaction and adjustment information with a view to improving the quality of forensic outpatient clinic services. It was thought that patient feedback was imperative if service improvements were to be

relevant and meaningful. It was also thought that patient-mediated service improvements might lead to enhanced treatment compliance and clinical outcomes. It was expected that a multidimensional satisfaction instrument (the SSS-30) would allow for the detection of discrete services deficiencies. It was also believed that satisfaction might be related to level of adjustment (or psychopathology), and that if a multidimensional, and brief, instrument (the HPSI) were concomitantly administered, one might be additionally able to tailor service improvements to discrete problem areas.

In terms of the SSS-30 scales, areas of compromised satisfaction were identified, but these were in the context of individuals being "mostly satisfied" or, at worst, satisfaction being "mixed". One could latch onto the areas of "mixed" satisfaction, but the SSS-30 scales did not provide enough detail to allow accurate corrective action. However, the information provided in the responses to the open-ended questions attached to the SSS-30 proved useful in clarifying areas of service satisfaction identified as "mixed". Further, the qualitative data provided information which was different across treatment programs. This is consistent with conclusions that dissatisfaction may be more freely expressed in a qualitative context, and that qualitative questions should be attached to quantitative surveys (Avis et al., 1997; Perrault et al., 1993; Polowczyk et al., 1993; Ross et al., 1993). Analysis of the quantitative data did not reveal a statistically significant difference for the SSS-30 subscale and overall scores across treatment programs. It seems, on the basis of this study, that general data can be captured by the SSS-30, that more specific detail is accessible primarily by qualitative means, and that the qualitative approach used would need to be additive over time to capture the detail necessary to implement reasoned change. The SSS-30 seems well-suited to repeated

comparisons with the same population over time, especially in terms of determining if changes implemented are having a the desired effect.

Analysis of HPSI subscale and overall scores did reveal a statistically significant difference across treatment programs, but this was confounded by the finding that T-scores were typically in the average (compared to the main normative base) range, or only slightly above average. Correlations between the SSS-30 and HPSI were not significant for Psychiatric Symptomatology, although they were for the other HPSI subscale and overall scores. Regression analysis suggested that symptomatology was a modest predictor of satisfaction. The notion that symptomatology might be related to satisfaction, and thus serve as a vehicle for making adjustment-specific change, was marginally supported. In this regard, future studies might benefit from the incorporation of psychiatric diagnostic categories and, perhaps, measures of outcome like Global Assessment of Functioning scores (American Psychiatric Association, 1994). However, in recent research (Pekarik & Wolff, 1996) it is argued that the correlation between satisfaction and other outcome measures is typically low and that satisfaction is likely related to something other than symptom or problem change. It is additionally suggested that although the assessment of satisfaction has merit in terms of quality improvement, it is not to be seen as a alternative for the discrete measurement of outcome.

A significant issue in this study is the degree to which the sample results can be generalized to the larger F.A.C.S. experimentally-accessible population. As explained in Chapter III, a non-random sample was obtained wherein selection was based solely on an individuals' willingness to participate. Given the lack of randomness it is not possible to

assert that the results are generalizable. Although analysis revealed that the sample and population are not remarkably dissimilar in terms of age and gender, further limitations to generalizability are suggested by a lack of data on variables including socioeconomic status, offense profile, psychiatric status, ethnic and cultural background, and the like. Salient in this regard, as well, is that data for those who refused to participate in the study, and for the significant number of individuals who prematurely terminated treatment, were not captured.

On a theoretical level, this study did little to enhance understanding of what satisfaction entails. Historical arguments that the construct is poorly defined and lacks clarity (Locker & Dunt, 1978; Pascoe, 1983; Ruggeri, 1994; Ware et al., 1983), and that it may be related to a number of other psychosocial factors including relief, fear of wasting the therapist's time, confidence in the therapist, ignorance of the system, feeling uncomfortable in commenting negatively or reluctance to criticize a system one is dependent on, and self-blame (Avis et al., 1997), remain salient. It would appear imperative that future studies incorporate assessment of these variables, perhaps, in a qualitative context, with a view to clarifying the meaning of "satisfaction" for patients.

Future Research

Analysis of data in this study did not support the contention that the SSS-30 is a multidimensional instrument. As a multidimensional concept of satisfaction has been viewed as indispensable to service change and improvement (Lewis, 1994), and as the SSS-30 has been previously found to be multidimensional (Greenfield & Attkisson, 1994), it would appear that further research into the dimensionality of satisfaction

(Distefano et al., 1983; Greenfield & Attkisson, 1989; Lebow, 1982; Pascoe, 1983), and by logical extension, the SSS-30, is warranted.

A particularly troublesome issue in this study was the fact that 94 of the 417 patients approached (22.5%) declined to participate. It is left to conjecture as to whether or not this refusal was a function of dissatisfaction, and it is similarly left to conjecture for the significant number of individuals who drop out of treatment prematurely. Salient in this regard is the contention (Posavac & Carey, 1997) that study participation may be a function of favorable program impressions. To obtain meaningful satisfaction data it would seem imperative to develop a method by which data for "refusers", and reasons for premature termination of treatment, are captured.

An attempt was made to reduce threats to validity related to instrumentation, method, data analysis, and sociopsychological artifact. In terms of instrumentation more effort should probably have been extended in terms of exploring diagnostic and life circumstance variables. With respect to method, sampling bias may have been introduced due to the exclusion of those who refused to participate, and those who terminated treatment prematurely. An attempt was made to reduce response bias but it is not known to what degree respondents believed that information would be held confidential. There seem to be significant issues related to trust, for those controlled by the legal system, that are not assuaged by the statements of an unfamiliar Research Assistant, or most others for that matter. Experience indicates that trust with this population develops only over the long term, if at all, and many of the respondents had not been receiving services for extended periods of time. It is recommended that these threats to internal validity (and the

previously discussed threats to population validity) be more stringently addressed in future research.

There is much support in the literature for incorporating complementary data sources when assessing patient satisfaction, and this may have provided significant information. For example, it may have been prudent, to the end of program improvement, to incorporate a variety of advocated ancillary measures (Lebow, 1987; Lebow & Newman, 1987; Lewis, 1994), including more detailed length of treatment data, engagement data, identifying barriers to accessibility, focus group discussions, and personal interviews. Additional recommended sources of complementary data include psychopathology change scores, symptom level and change, and quality of life (Ogles, Lambert & Masters, 1996), and functioning, well being, and treatment utilization (Sederer et al., 1996). Others have suggested the incorporation of data related to the effects of different types of treatment (Azim & Joyce, 1986; Dyck & Azim, 1983; Sederer et al., 1996), and of perceptions of psychotherapeutic alliance (Gaston & Sabourin, 1992), both of which have been found to impact satisfaction. The practicality of incorporating these data sources in future research should be explored.

In conclusion, it was found that detailed identification of service (dis)satisfactions is not easily attained. Although satisfaction was, in a general sense, "mixed" to "mostly satisfied", clarification of discrete areas of dissatisfaction was only marginally accomplished. In an attempt to remedy this problem, replication of this study with improved sampling, refined qualitative measurement, access to study "refusers" and treatment non-completers, and increased use of complementary data sources, is recommended.

References

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

Attkisson, C. C., & Greenfield, T. K. (1994). Client satisfaction questionnaire-8 and service satisfaction scale-30. In M. Maruish (Ed.), The use of psychological testing for treatment planning and outcome assessment (pp. 402-420). Hillsdale, NJ: Erlbaum

Attkisson, C. C., & Zwick, R. (1982). The client satisfaction questionnaire: Properties and correlations with service utilization and psychotherapy outcome. Evaluation and Program Planning, 5, 233-237.

Avis, M., Bond, M., & Arthur, A. (1997). Questioning patient satisfaction: An empirical investigation in two outpatient clinics. Social Science and Medicine, 44, 85-92.

Azim, H. F. A., & Joyce, A. S. (1986). The impact of data-based program modifications on the satisfaction of outpatients in group psychotherapy. Canadian Journal of Psychiatry, 31, 119-122.

Bene-Kociemba, A., Cotton, P. G., & Fortgang, R. C. (1982). Assessing patient satisfaction with state hospital and after care services. American Journal of Psychiatry, 139, 660-662.

Biderman, A., Carmel, S., & Yeheskel, A. (1994). Measuring patient satisfaction in primary care: A joint project of community representatives, clinic staff members and a social scientist. Family Practice, 11, 287-291.

BMDP (1990). BMDP Statistical Software [Computer software: version PC90 for IBM PC/MS-DOS]. Los Angeles, CA: BMDP Inc.

Braun, J. & Linder, D. E. (1979). Psychology today: An introduction (4th ed.). Toronto: Random House.

Calnan, M. (1988). Towards a conceptual framework of lay evaluation of health care. Social Science and Medicine, 27, 927-923.

Cattell, R. B. & Vogelman, S. (1977). A comprehensive trial of the scree and KG criteria for determining the number of factors. Multivariate Behavioral Research, 12, 289-325.

Carscaddon, D. M., George, M., & Wells, G. (1990). Rural community mental health consumer satisfaction and psychiatric symptoms. Community Mental Health Journal, 26, 309-318.

Christensen, L. B. (1997). Experimental methodology. (7th ed.). Needham Heights, MA: Allyn and Bacon.

Cleary, P., & McNeil, B. (1988). Patient satisfaction as indicator of quality care. Inquiry, 25, 25-36.

Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159.

Dansky, K. H., & Brannon, D. (1996). Discriminant analysis: A technique for adding value to patient satisfaction surveys. Hospital and Health Services Administration, 41, 503-513.

Davies, A. R., & Ware, J. E. (1981) Measuring patient satisfaction with dental care. Social Science and Medicine, 15A, 751-760.

Deane, F. (1993). Client satisfaction with psychotherapy in two outpatient clinics in New Zealand. Evaluation and Program Planning, 16, 87-94.

Deiker, T., Osborn, S. M., Distefano, M. R., & Pryer, N. W. (1981). Consumer accreditation: Development of a quality assurance patient evaluation scale. Hospital and Community Psychiatry, 32, 565-567.

Distefano, M., Pryer, M., & Garrison, J. (1981). Client satisfaction and interpersonal trust among hospitalized psychiatric patients. Psychological Reports, 49, 420-422.

Distefano, M., Pryer, M., & Baker, B. (1983). Factor structure of a clients' satisfaction scale with psychiatric inpatients. Psychological Reports, 53, 1155-1159.

Donabedian, A. (1988). The quality of care. How can it be assessed? Journal of the American Medical Association, 260, 1743-1748.

Dyck, R. J., & Azim, H. F. A. (1983). Patient satisfaction in a psychiatric walk-in clinic. Canadian Journal of Psychiatry, 28, 30-33.

Elbeck, M. A., & Fectau, G. (1990). Improving the validity of measures of patient satisfaction with psychiatric care and treatment. Hospital and Community Psychiatry, 41, 998-1001.

El-Guebaly, N., Toews, J., Leckie, A., & Harper, D. (1983). On evaluating patient satisfaction: Methodological issues. Canadian Journal of Psychiatry, 28, 24-29.

Fox, J. G., & Storms, D. M. (1981). A different approach to sociodemographic predictors of satisfaction with health care. Social Science and Medicine, 15A, 557-564.

Fletcher, R. H., Fletcher, A. W., & Wagner, E. H. (1996). Clinical epidemiology: The essentials. Baltimore, MD: Williams and Wilkins.

Gaston, L., & Sabourin, S. (1992). Client satisfaction and social desirability in psychotherapy. Evaluation and Program Planning, 15, 227-231.

Glass, A. P. (1995). Identifying issues important to patients on a hospital satisfaction questionnaire. Psychiatric Services, 46, 83-85.

Greenfield, T. K. (1983). The role of client satisfaction in evaluating university counselling services. Evaluation and Program Planning, 6, 315-327.

Greenfield, T. K., & Attkisson, C. C. (1989). Steps toward a multifactorial satisfaction scale for primary care and mental health services. Evaluation and Program Planning, 12, 271-278.

Gustafson, D. H. (1991). Expanding on the role of patient as consumer. Quality Review Bulletin, 17, 324-325.

Gutek, B. (1978). Strategies for studying client satisfaction. Journal of Social Issues, 34, 44-56.

Hall, J. A., & Dornan, M. C. (1988). What patients like about their medical care and how often they are asked: A meta-analysis of the satisfaction literature. Social Science and Medicine, 27, 935-939.

Hall, J. A., Milburn, M. A., Roter, D. L. & Daltroy, L. H. (1998). Why are sicker patients less satisfied with their medical care? Tests of two explanatory models. Health Psychology, 17, 70-75.

Hansen, D. J., Giacoletti, A. M. & Nangle, D. W. (1995). Social interactions and adjustment. In V. B. Van Hasselt & M. Hersen (Eds.), Handbook of adolescent psychopathology: A guide to diagnosis and treatment (pp. 102-129). New York, NY: Lexington

Holcomb, W. R., Adams, N. A., Ponder, H. M., & Reitz, R. (1989). The development and construct validation of a consumer satisfaction questionnaire for psychiatric inpatients. Evaluation and Program Planning, 12, 189-194.

Holden, R. R. (1996). Holden psychological screening inventory (HPSI). Toronto: MHS.

Holden, R. R., & Grigoriadis, S. (1995). Psychometric properties of the Holden Psychological Screening Inventory for a psychiatric offender sample. Journal of Clinical Psychology, 51, 811-819.

Kazdin, A., & Wilson, T. (1978). Criteria for evaluating psychotherapy. Archives of General Psychiatry, 35, 407-416.

Keppler-Seid, H., Windle, C., & Woy, J. (1980). Performance measures for mental health programs. Community Mental Health Journal, 16, 217-234.

Kerlinger, F. N. (1973). Foundations of behavioral research (2nd ed.). New York: Holt.

Larsen, D. L., Attkisson, C. C., Hargreaves, W. A., & Nguyen, T. D. (1979). Assessment of client/patient satisfaction in human service programs: Development of a general scale. Evaluation and Program Planning, 2, 197-207.

Lebow, J. (1982). Consumer satisfaction with mental health treatment. Psychological Bulletin, 91, 244-259.

Lebow, J. (1983). Research assessing consumer satisfaction with mental health treatment: A review of findings. Evaluation and Program Planning, 6, 211-236.

Lebow, J. (1987). Acceptability as a simple measure in mental health program evaluation. Evaluation and Program Planning, 10, 191-195.

Lebow, J., & Newman, (1987). The utilization of simple measures in mental health program evaluation. Evaluation and Program Planning, 10, 189-190.

Lehr, H., & Strosberg, M. (1991). Quality improvement in health care: Is the patient still left out? Quality Review Bulletin, 17, 326-329.

Levois, M., Nguyen, T., & Attkisson, C. C. (1981). Artifact in client satisfaction in assessment: Experience in community mental health settings. Evaluation and Program Planning, 4, 139-150.

Lewis, J. R. (1994). Patient views on quality care in general practice: Literature review. Social Science and Medicine, 35, 655-670.

Linder-Pelz, S. (1982). Toward a theory of patient satisfaction. Social Science and Medicine, 16, 577-582.

Locker, D., & Dunt, D. (1978). Theoretical and methodological issues in sociological studies of consumer satisfaction with medical care. Social Science and Medicine, 12, 283-292.

Love, R. E., Caid, C. D., & Davis, A. (1979). The user satisfaction survey: Consumer evaluation in an inner city community health center. Evaluation and the Health Profession, 2, 42-54.

Margolis, R. B., Sorenson, J. L., & Galano, J. (1977). Consumer satisfaction in mental health delivery services. Professional Psychology, 8, 11-16.

Marshall, G.N., Hays, R. D., & Mazel, R. (1996). Health status and satisfaction with health care: Results from the medical outcomes study. Journal of Consulting and Clinical Psychology, 64, 380-390.

Nelson, C. W., & Niederberger, J. (1990). Patient satisfaction surveys: An opportunity for total quality improvement. Hospital and Health Services Administration, 35, 409-427.

Ogles, B. M., Lambert, M. J., & Masters, K. S. (1996). Assessing outcome in clinical practice. Boston: Allyn & Bacon.

Pascoe, G. (1983). Patient satisfaction in primary health care: A literature review and analysis. Evaluation and Program Planning, 6, 185-210.

Pascoe, G., & Attkisson, C. C. (1983). The evaluation ranking scale: A new methodology for assessing satisfaction. Evaluation and Program Planning, 6, 335-348.

Pekarik, G. & Wolff, C. (1996). Relationship of satisfaction to symptom change, follow-up adjustment, and clinical significance. Professional Psychology: Research and Practice, 27, 202-208.

Perrault, M., Leichner, P., Sabourin, S., & Gendreau, P. (1993). Patient satisfaction with outpatient psychiatric services: Qualitative and quantitative assessments. Evaluation and Program Planning, 16, 109-118.

Polowczyk, D., Brutus, M., Vidal, J., & Cipriani, D. (1993). Comparison of patient and staff surveys of consumer satisfaction. Hospital and Community Psychiatry, 44, 589-591.

Posovac, E. J. & Carey, R. G. (1997). Program evaluation: methods and case studies. (5th ed.). NJ: Prentice-Hall.

Reddon, J. R. (1994). PROCRUS: Procrustes analysis package [Software: version 2.7]. Alberta Hospital, Edmonton: Edmonton, Canada.

Reddon, J. R., Pope, G. A., Dorais, S., & Pullan, M. D. (1996). Improvement in psychosocial adjustment for psychiatric patients after a 16-week life skills education program. Journal of Clinical Psychology, 52, 169-172.

Reddon, J. R., Pope, G. A., Friel, J. P. & Sinha, B. K. (1996). Leisure motivation in relation to psychosocial adjustment and personality in young offender and high school samples. Journal of Clinical Psychology, 52, 1-7.

Rogers, T. B. (1995). The psychological testing enterprise: An introduction. Pacific Grove, CA: Brooks/Cole.

Ross, C. K., Steward, C. A., & Sinacore, J. M. (1993). The importance of patient preferences in the measurement of health care satisfaction. Medical Care, 31, 1138-1149.

Ross, C. K., Steward, C. A., & Sinacore, J. M. (1995). A comparative study of seven measures of patient satisfaction. Medical Care, 33, 392-406.

Ruggeri, M. (1994). Patients' and relatives' satisfaction with psychiatric services: The state of the art of its measurement. Social Psychiatry and Psychiatric Epidemiology, 29, 212-227.

Ruggeri, M., & Dall'Agnola (1993). The development and use of the Verona Expectations for Care Scale (VECS) and the Verona Satisfaction Scale (VSSS) for measuring expectations and satisfaction with community-based psychiatric services in patients, relatives and professionals. Psychological Medicine, 23, 511-523.

Scheirer, M. (1978). Program participants' positive perceptions: Psychological conflict of interest in social program evaluation. Evaluation Quarterly, 2, 53-70.

Sederer, L. I., Dickey, B., & Hermann, R. C. (1996). The imperative of outcomes assessment in psychiatry. In L. I. Sederer & B. Dickey (Eds.), Outcomes assessment in clinical practice (pp. 1-7). Baltimore, MD: Williams & Wilkins.

Slater, V., Linn, M. W., & Harris, R. (1982). A satisfaction with mental health treatment scale. Comprehensive Psychiatry, 23, 68-74.

SPSS (1998). Statistical Package for the Social Sciences [Computer software: version Base 8.0 for Windows]. Chicago, IL: SSPS Inc.

Svensson, B., & Hansson, L. (1994). Patient satisfaction with inpatient psychiatric care. Acta Psychiatrica Scandinavica, 90, 379-384.

Tanner, B. A. (1982). A multi-dimensional client satisfaction instrument. Evaluation and Program Planning, 5, 161-167.

Tanner, B. A., & Stacy Jr., W. (1985). A validity scale for the SHARP consumer satisfaction scales. Evaluation and Program Planning, 8, 147-153.

Velicer, W.F. (1976) Determining the number of components from the matrix of partial correlations. Psychometrika, 41, 321-327.

Vuori, H. (1987). Patient satisfaction - as an attribute or indicator of the quality of care. ORB, 13 (3), 106-108.

Ware, J. E. (1978). Effects of acquiescent response set on patient satisfaction. Medical Care, 16, 327-336.

Ware, J. E. (1981). How to survey patient satisfaction. Drug Intelligence and Clinical Pharmacy, 15, 892-899.

Ware, J. E., Davies-Avery, A., & Stewart, A. L. (1978). The measurement and meaning of patient satisfaction: A review of the recent literature. Health and Medical Services Review, 1, 1-15.

Ware, J. E., Snyder, M. K., Wright, W. R., & Davies, A. R. (1983). Defining and measuring patient satisfaction with medical care. Evaluation and Program Planning, 6, 247-263.

Weinstein, R. (1979) Patient attitudes toward mental hospitals. Journal of Health and Social Behavior, 20, 237-258.

Williams, B. (1994). Patient satisfaction: A valid concept? Social Science and Medicine, 38, 509-516.

Williams, B., & Wilkinson, G. (1995). Patient satisfaction in mental health care: Evaluating an evaluative method. British Journal of Psychiatry, 166, 559-562.

Wright, R. G., Heiman, J. R., Shupe, J., & Olvera, G. (1989). Defining and measuring stabilization of patients during 4 years of intensive community support. American Journal of Psychiatry, 146, 1293-1298.

Appendix A

CONSENT FORM

RESEARCH TITLE: Patient Satisfaction With Forensic Psychiatric Outpatient Services

PRIMARY INVESTIGATOR: Dr. Wendy Austin, Associate Professor, Faculty of Nursing, 4-130 Clinical Sciences Building, University of Alberta, Edmonton, Alberta, T6G 2G3

CO-INVESTIGATOR: Robert D. Reddick, Graduate Student, Faculty of Nursing, University of Alberta and Program Manager, Forensic Assessment and Community Services (F.A.C.S.) , 10242-105ST, Edmonton, Alberta T5J 3L5 Telephone (403) 428-0455

PURPOSE: To determine the level of patient satisfaction with treatment services provided by F.A.C.S. This information will be used to improve the services you receive.

PROCEDURE: A research assistant will ask you to fill out 2 forms. One form is about the services and treatment you are getting. The second form is about your level of adjustment. This will take about 20 minutes in total. The research assistant will help you and answer any questions you may have.

PARTICIPATION: There will likely be no harm to you if you take part in this study. You and others may benefit as your information may help us provide better services.

You do not have to be in this study if you do not wish to be. If you decide to be in the study, you may drop out at any time by telling the researcher. You do not have to answer any questions if you do not want to. Taking part in this study will not affect your care at the F.A.C.S. clinic.

Information that could identify you will not appear in reports of this study. A code number, not your name, will be used on forms and question sheets. All forms will be kept in locked cabinets for seven years after the study is done. Consent forms which have your name on them will be kept separate. The information given by you may be used in another study in the future, if approval is given from the proper ethics review committee. The information and findings of this study may be published, or presented at conferences. Your name or any material that may identify you will not be used. Your primary or group therapist will only see a summary of all responses. He or she will <u>not</u> see your responses. If you have any questions or concerns about this study, at any time, you can call the researcher at 428-0455.

CONSENT: I have read this information. I agree to be in this study. I have had a chance to ask whatever questions I have about the study and my part in it. My questions have been answered to my satisfaction. I know that I may contact the Primary or Co-Investigator if I have questions now or in the future. I have been given a copy of this form to keep.

_____(Signature of Participant or Legal Guardian, and Date)

_____(Name of Legal Guardian, and Date, for verbal consent)

_____(Signature of Witness, and Date, for verbal consent by Legal Guardian)

_____(Signature of Research Assistant, and Date)

REQUEST FOR SUMMARY: If you wish to receive a summary of this study when it is finished, please complete the next section:

Name:_____

Address:_____

CODE NUMBER:_____